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A Grammar of Old Turkic

by

Marcel Erdal

Brill

A GRAMMAR OF OLD TURKIC

HANDBOOK OF ORIENTAL STUDIES
HANDBUCH DER ORIENTALISTIK

SECTION EIGHT

CENTRAL ASIA

edited by

DENIS SINOR · NICOLA DI COSMO

VOLUME THREE

A GRAMMAR OF OLD TURKIC

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BRILL
LEIDEN · BOSTON
2004

This book is printed on acid-free paper

Library of Congress Cataloging-in-Publication Data

Erdal, Marcel.
A grammar of Old Turkic / by Marcel Erdal.
p. cm. — (Handbook of Oriental studies. Central Asia = Handbuch der Orientalistik. Achte Abteilung, Zentralasien ; 3 Bd.)
Includes bibliographical references and index.
ISBN 9004102949 (alk. paper)
1. Old Turkic language—Grammar. I. Title. II. Handbuch der Orientalistik. Achte Abteilung, Handbook of Uralic studies ; v. 3.
PL31.1 .E694 2004
494'.31—dc21 00-056470
CIP

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Erdal, Marcel:
A grammar of old Turkic / by Marcel Erdal. – Leiden ; Boston ; Köln : Brill, 2004
(Handbuch der Orientalistik : Abt. 8, Zentralasien ; 3)
ISBN 90–04–10294–9

ISSN 0169-8524
ISBN 90 04 10294 9

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For
Eran
and
Talia

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PREFACE

Writing a grammar of Old Turkic has for two main reasons proven a quite formidable task. The first reason is the sheer size of the corpus, which has, during the last decade, kept growing at a breathtaking pace. At present, none of the three most voluminous sources, the Suvarṇaprabhāsa, the Maitrisimit and the Daśakarmapathāvadānamālā has as yet been edited in a way integrating all available manuscripts. Especially the DKPAM, with its lively narrative containing so many specimens of direct speech, will no doubt further contribute to our knowledge of the language. As it is, I was not even able to work myself through all the extant published material so that, in principle, surprises in any section of the grammar are still possible. The only thing I can say is that such surprises have come less and less often during the last months.

Another reason why this task has proven to be a formidable one is the number of articles which appeared over the years on various phonological and morphological matters relevant for the questions which I have tried to answer. Although I have unfortunately been able to take this literature into account only to a limited extent, many will feel that I have indulged too much in argumentation with colleagues, thus giving various passages the air of papers in a journal. The fact is that I have, in many sections, felt the need not only to state my views but also to justify them as against competing opinions. This motive may sometimes also have led to an overaccumulation of examples, making reading difficult. However, those wishing to continue research into various topics will, I think, be thankful for a wealth of material which will, hopefully, help them reach their own judgements.

I would encourage colleagues to come forth with their criticisms. One domain which should be further developed is tense and aspect. Another matter which I have left for others is a detailed appraisal of the sources from a dialectological and diachronic point of view. The work will be attacked for having handled such diverse sources as the Orkhon inscriptions, Uygur Tantric literature and the Qutadgu Bilig in a single grammar. This approach is, I think, at present justified by the fact that not all isoglosses seem to fit into neat bundles. Where mss. in Sogdian script share several linguistic features with the Qutadgu Bilig, where Orkhon Turkic forms and constructions find their specific explanation in Uygur patterns, it would be highly counter-productive to split up the

description. The present work is in any case quite unlikely to be the last word on the grammar of Old Turkic. Or so I hope, expecting this book to attract new scholars to this domain of research.

The passages quoted should not be mistaken for editions; for exact and full rendering of the texts the reader is referred to the work of the editors, or better to the facsimiles of the mss. as far as Uygur is concerned: Most of these are now readily available in excellent quality on the internet and all the ones extant in Germany will be available in the foreseeable future. Within the VATEC project participants from Berlin, Frankfurt and Göttingen are undertaking an electronic reedition of Uygur manuscripts, offering a full transliteration, a transcription, interlinear morphological analysis, a German or English translation and a full thesaurus. In the present grammar I have – to enhance readability – sometimes felt free to tacitly disregard small lacunae, to spell out words which scribes traditionally write in abbreviated form (e.g. with missing vowels) and the like, especially in sections dealing with syntax. The runiform inscriptions deserve better documentation than is publicly available to date.

I should apologize for not having offered interlinear morpheme and lexeme analysis of words and interlinear translations, which would have much enhanced usability for readers not all too familiar with Turkic. Doing that would, however, have lengthened the volume by hundreds of pages, making its publication impossible.

Irina Nevskaya and Mark Kirchner read earlier versions of the book and offered valuable remarks (generally heeded – but not always). Peter Zieme helped with information on ms. readings when these could not be obtained on the internet, Mehmet Ölmez did some work towards preparing the word index, Jens Peter Laut pointed out grave inconsistencies in my text references. I would like to express my gratitude to these dear friends as well as to Patricia Radder from the Brill publishing house, who put enough pressure on me to bring the work to an end, but not too much for me to despair of it completely. And last, but not least at all, to Yona – for support during the last twenty years.

May 2004 Marcel Erdal

CHAPTER ONE

INTRODUCTION

Since prehistoric times, pastoral nomads roamed the Eurasian steppe belt while hunters and gatherers populated Siberia, the vast stretch of land to the north of this belt. South Siberia, with its fertile regions as the Minusa valley, served as meeting ground for these two types of cultures as well as attracting invaders from afar. Accounts about the inhabitants of these regions can be found in written documentation left to us by the Chinese, the Greeks and others who used writing before they themselves did so. Archeology also has unearthed much about them and will no doubt bring more to light in the future. Some of these ethnical groups were Indo-European or, more exactly, Indo-Iranian and presumably also Proto-Tokharian. Others no doubt were Turkic or akin to the Turks: Chinese sources report towards the middle of the 6th century A.D. that people with this name had a sort of monopoly on iron mining in the Altai mountains. The modern or recent groups now lumped together as Palæo-Asiatic must have been indigenous to North Asia. In addition, some Uralic groups, coming from Western Siberia and North Eastern Europe, probably moved into this part of the world in fairly early times, as also Mongolic and Tunguz groups, which, however, came from the east. Although the languages of these peoples by all available evidence differed in genetic affiliation, their shared environments and their contacts over time must have generated various sorts of affinity among them as to material and spiritual culture and, indeed, anthropological characteristics. Through confederations among Central Eurasian ethnical units as well as the subjugation of one group by another, political entities were created, as a result of which culturally or linguistically differing groups found themselves within larger states. Language contact and convergence are among the normal results of such processes.

1.1. *Early and Proto-Turkic and Altaic*

In this book, which deals with language, we are interested in linguistic identity, in this case in ethnicities speaking varieties of Turkic; not in anthropological or cultural identity as documented in descriptions by neighbouring societies or unearthed by archaeologists, nor in ethnical or political identity as emerging from the accounts accumulated among

nations in Western or Eastern Asia. Whether such early North East Asian peoples as the Xiung-nu, Centrals Asian peoples as the Wusun or Eastern European peoples as the Huns spoke Turkic languages is not known; their identity is therefore irrelevant for the intents and purposes of the present work. When differing tribes shared one political fate either of their own will or after having been incorporated into some framework by force, they would, in the course of time, converge in various ways, not only administratively but also culturally and linguistically. Thus, tribes not being Turkic by origin might have adopted some form of Turkic language or dialect, modifying it even while adopting it, whereas some Turkic tribes may have given up their Turkic idiom. What interests us here is linguistic identity to the exclusion of all other ways in which ethnic groups can be labelled. Turkic-speaking state elites would have made their variant of Turkic into the national language, sometimes causing other (Turkic or non-Turkic) groups to use it, perhaps as a written language, beside the idiom they themselves spoke; this may have been the case in the Khazar state, for instance. On the other hand, Turks could well have had to use some language beside their own if they found themselves in a political, ethnical or cultural constellation in which some other language occupied the central position; or, alternately, they may have used another language for writing purposes instead of beginning to write their own: For instance, the Turkic military elites of the Ghaznavid and Sälčük states (starting with the 10th century A.D.) wrote Persian or Arabic but no Turkic. Thus, the identity of the elite of the first Türk empire (6th-7th centuries A.D.) is of no interest to us here as long as their only text which (at present) is known to us[1] is a Sogdian inscription, no possible Turkic etymologies being available for any of the titles mentioned in it. Similarly, it would not make much sense to try to delimit an ethnic identity which spoke Proto-Turkic, although Proto-Turkic is a useful linguistic tool worth constructing (or 'reconstructing').

Turkic does start to become tangible as a linguistic entity at least around the beginning of the Christian era, when neighbouring nations learn and document words which we can identify as being clearly Turkic (by morphological shape, for instance): A case in point is the term *suv+lag* 'watering place', found in early Chinese sources,[2] where

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[1] The Bugut inscription, written around 580 A.D.: See Kljaštornyj & Livšic 1972; latest readings in Yoshida & Moriyasu 1999.

[2] Cf. Schmitt 1971. There were several places of this name, one of them being Kāšǧar.

at least the suffix is definitely Turkic.[3] The matter is often not as simple as in this case, in that foreign documentation often consists of titles, which tend to get passed from one language to another: If, in Hungary, the Avar ruler was called *kaganus*, this by itself does not mean that the Avars were Turks: As it happens, the source of this title appears not to have been Turkic in the first place, and it was also borrowed by other Central Eurasian nations. Some further evidence *may* indicate that the Avars spoke some form of Turkic.

The Turkic languages are genetically fairly close-knit although they have, of course, diverged in time (and, in certain cases, converged). Reconstructing the hypothetical Proto-Turkic language through the genetic comparison of the Turkic languages seems to be a feasible goal, but work in this direction has been slow, sometimes marred by dilettantism: Much of it took place in the Soviet Union, where too much weight was put on modern evidence at the expense of earlier stages of the language. Scholars have put much less energy and thought into a model of inner-Turkic genetic affinities than into the Altaic problem: the question whether the great number of lexical and grammatical units and typological traits which Turkic shares with the Mongolic group of languages and, to a considerably lesser extent, with the Tunguz languages, Korean and Japanese points at a genetic relationship or whether it is attributable to borrowing, copying activity or coincidence. This question, which deserves collective treatment by specialists for the different languages and language groups, will not be dealt with here.[4] What is certain is that a lot of the contact involving the copying of specific items in all domains of language between Turkic and Mongolic on the one hand, Mongolic and Tunguz on the other hand took place before the peoples speaking these languages began putting them into writing. It is therefore in any case useful to speak of 'Altaic languages' as a term covering at least these three language groups; as an areal term if not as a genetic one. Turkic and Mongolic may well be related genetically (my knowledge of the other languages is quite insufficent for me to make any statements in this respect) but adequate serious research on the nature of their relationship is still lacking.

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[3] Not to be confused with +*lXg*, which is found also in Mongolic. The symbol + here used marks nominal juncture, whereas - is used to indicate juncture between verbs and their suffixes.

[4] Structural affinities with a non-Altaic language group (pointed out in a review, Erdal 1997) will be dealt with in the near future; cf. further Erdal 1998 for the domain of verb formation in Turkic and Mongolic.

The earliest discovered documents written in Central Eurasia are Indo-European and Chinese. When, in the 6th century A.D., the first Türk kaghanate was formed in present-day Mongolia, its rulers appear to have used Sogdian, an Iranian language, for writing.[5] At about the same time, the Turkic-speaking Khazars formed a state in the Turkic Far West, in an area roughly bound by the Caucasus, the Ural river (called *Yayïk* in Turkic, Δάιξ in Greek sources) and present-day Ukraine. Runiform inscriptions discovered in this region and further west were presumably inscribed some time during the second half of the first millenium A.D.. They can be attributed to the Khazars, to the Avars, to the equally Turkic Pechenegs or Bolgars or to other Turkic ethnic entitites, but interpretations proposed for them are unsatisfactory and doubtful.

The earliest readable, understandable and datable Turkic texts are the official inscriptions of the second Turk kaghanate, the Orkhon inscriptions, the first of which appears to have been from slightly before 720 A.D.; the runiform alphabet in which these inscriptions are written was deciphered by Vilhelm Thomsen in 1893. The age of the inscriptions found in South Siberia near the upper Yenisey river, most of which are in the same script, is not known for certain; some of them may well be older than the Orkhon inscriptions. The Bactrian mss. from Afghanistan edited by Sims-Williams (2000a) contain a number of Old Turkic words and word groups; they are no doubt linked to the domination of the Western Türk after they vanquished the Hephthalites together with the Sassanians. The earliest of these documents have been dated to the first half of the 7th century; they are thus the earliest sources containing Old Turkic phrases (and not just single terms): These words and phrases (e.g. *tapaglïg* 'revered, reverent' in a document from 640 A.D.) are clearly in the same language as other Old Turkic sources.[6] Through their appearance in the West Asian part of Turkic expansion, the term 'East Old Turkic' used by Johanson (2001 and elsewhere) to refer to this language is made obsolete, if it is to apply to any directly documented language: Old Turkic as here described was presumably, with minor variation, used in West Turkestan as well (which is, after all, where Qarakhanid was spoken), and all the way south to Bactria.

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[5] See above, and footn. 1.

[6] *kïnžuy* 'queen, consort' may actually be more archaic than Old Turkic *kunčuy* in view of the shape of the source of this term in Early Middle Chinese; the Bactrian ms. in which *kïnžuy* appears seven times in reference to a Khaladj princess is dated to the year 711, which makes it contemporaneous with the Orkhon inscriptions.

The earliest accessible Turkic sources in Eastern Europe are the few sentences left to us by the Danube Bolgars, which (like Bactrian) are in Greek writing and belong to the 9th or 10th centuries:[7] While all early Asian documentation represents a single fairly close-knit language, the sparse and difficult Danube Bolgarian material is aberrant, represents a different idiom and is not taken into consideration here. Nor are the Volga Bolgarian inscriptions, which date from the Middle Turkic period (13th-14th century); that corpus as well represents a different language than the one described here.[8] To this material one might add words borrowed from varieties of early and middle European Turkic into Hungarian. This rich evidence is important for the reconstruction of Proto-Turkic and but unlikely to yield specific evidence for the language dealt with in the present work. Kāšġarī in the 11th century gives linguistic information on a number of Turkic dialects or languages of his time; see Brockelmann 1921 and Dankoff & Kelly 1985 on this.

The corpus of extant Turkic is conveniently divided into three periods, old, middle and modern. The end of the Old Turkic period was brought about by the impact of the Mongol invasion in the 13th century, which covered everything from South China to Poland and Hungary, from Eastern Siberia to Syria and Central Anatolia. Involving the whole of the Turkic world, it at first put most of the Turks to flight, breaking up social structures and rearranging ethnic geography. Subsequently, most Turkic groups were engulfed in the boundless Mongol empire and its successor states, in which they were usually the culturally and ethnically dominating though not the leading element; this had the effect of enhancing inter-Turkic linguistic contact and leveling. During the Middle Turkic period, which was ushered in by this upheaval, most of the Turkic world became Islamic; except, that is, those parts of it which were dominated by China and later by the (Mongolian) Kalmyks. Islam brought about greater literacy among much of the Turkic world. The Eastern part of Chinese Turkestan, Gansu, Mongolia and Southern Siberia including and east of the Altay range remained outside the influence of Islam. In this eastern and north eastern part of Asia, Turks went on adhering to Buddhism or to varieties of Shamanism, partly influenced by Buddhism. In Eastern Europe there were also Christian and Jewish Turkic-speaking groups, but very little written material has survived from them from the early Middle Turkic period; the 14th century Codex Comanicus is one important Christian Middle Turkic

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[7] See Erdal 1988 for one important such source and its relationship with the Danube-Bolgarian inscriptions.

[8] See Erdal 1993 for the Volga Bolgarian corpus.

source (in Latin characters). Middle Turkic is, on the whole, characterized by two or three written languages in the Islamic literary tradition, often quite distinct from the dialects and languages spoken by the authors, evolving over time and actually varying from author to author and indeed from manuscript to manuscript. However, the sources of this period practically from the beginning show a clear division between four ethnically and geographically distinct dialect groups crystallizing into written languages: Eastern Turkic, Kipchak, Bolgarian and Oguz.

Northern and central parts of all this were then gradually incorporated into Russia. The Modern Turkic period starts around the middle of the 19th century, when scholars such as Castrén, Vámbéry, Raquette, Böhtlingk or Radloff described as yet unwritten Turkic languages and dialects of High Asia. At about the same time, Christian missionaries initiated the alphabetisation of some of these languages with the purpose of spreading their faith; this is how the first sources of Chuvash or Shor were printed. Travellers such as Stralenberg or Pallas had, since the 18th century, supplied the scholarly world with some preliminary information about such languages. By the end of the 19th century Kazakh, Azeri or Ottoman authors were increasingly making their written languages look like their speech. For languages like Tatar or Turkmen, parting from the Arabic alphabet in the 20th century was the decisive step into a relatively faithful representation of national tongues.

Old Turkic as described in this book comprises all extant texts written in early *Asian* Turkic as well as phrases appearing in sources in other Asian languages such as the Bactrian mss. (Sims-Williams 2000a) or Maḥrn. Since early *European* Turkic is practically nonexistent as an unstarred entity, no confusion can, we think, come from using the term 'Old Turkic' to refer not to an abstract stage in the history of the Turkic languages in general, but to a specific language once spoken in central regions of Asia, and delimited by the corpus which represents it. My use of the term 'Common Turkic' is explained in the following section.

1.2. *The Old Turkic corpus and its parts*

This book deals with the remains of what was written down in the Asian domains of the early Turks, which consists of three corpuses:

1) Two hundred odd inscriptions in the Old Turkic runiform script, presumably 7th to 10th century. These were discovered mostly in present day Mongolia (the area covering the territory of the second Türk empire and the Uygur steppe empire following upon it) and in the upper

Yenisey basin (the domains of the Qïrqïz and Čik tribes) in central South Siberia. A few readable runiform inscriptions were discovered further west, in the Altay mountains all the way to the Irtysh river, sporadically all over present-day Kazakhstan and Kirgizstan (here especially in Talas, the capital of the Western Second Türk kaghanate) and the north eastern part of Chinese Turkestan; see e.g. Vasil'ev 1976/78 for a short survey. Most of these are epitaphs, but some are mere graffiti on prominent rocks by the side of main roads. There also are some objects (e.g. coins, mirrors, bricks, a spindle whorl, bowls) inscribed with the same script. Many of the runiform inscriptions from Mongolia are official, but most of the other ones stem from common (though sometimes obviously highly regarded) individuals.

2) Old Uygur[9] manuscripts from the eastern part of present-day Xinjiang and Gansu (China), from the 9th century on, in the Uygur, Manichæan, runiform,[10] Brāhmī, Sogdian, Syriac, and Tibetan scripts. Most of them are kept in Berlin but there are collections also in London, St. Petersburg, Paris, Kyōto, Stockholm, Helsinki, Ankara, Istanbul and China itself; a few pieces have landed elsewhere. The Uygur ms. corpus is by far the most extensive among the three. Much of it consists of Buddhist, Manichæan or Christian religious material; there are also legal documents such as contracts, personal or administrative letters, medical or astrological treatises, glossaries, folkloric sources and prose and verse narrative texts. Approximately three quarters of the whole corpus consist of Buddhist sources (mostly belonging to its *mahāyāna* branch). Manichaean sources make up less than 10%, but most of these are relatively old. The Christian texts are the least numerous and do not seem to be particularly early. The present description tries to base itself in principle primarily on mss. thought to antedate the (mid-13th century) establishment of Mongol rule. Sources from the rule of the Yuan (i.e. Mongolian) dynasty were by their authors meant to be in the same language as earlier sources, however, and can be difficult to tell from earlier ones.

Uygur scholars nowadays broadly distinguish three stages: The pre-classical stage including most of the Manichæan material but also

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[9] We will, henceforth, use the term Uygur to refer to Old Uygur as being described here, rather than to Modern Uygur now spoken in Xinjiang, Kazakhstan etc., or to Middle Uygur as documented from Ming and other pre-modern sources.

[10] There is sometimes some confusion regarding the linguistic assignment of the runiform mss., e.g. in Johanson 1998: 85: These are written in the same language as the rest of Xinjiang Uygur (within which there are dialect differences); the language of the runiform inscriptions of the Uygur Empire found on steles in Mongolia is, on the other hand, practically the same as that of Orkhon Turkic.

Buddhist texts like the extensive Sängim ms. of the Maitrisimit; the so-called koiné[11] stage, including e.g. the translations made from Chinese by the team of Šiŋko Šali Tutuŋ or the DKPAM, and, thirdly, the late Uygur stage which we find in Tantric texts like UigTot. Criteria for the linguistic dating of Old Turkic sources were first offered in Erdal 1979 (a reformulation of a section in Erdal 1976). The topic was subsequently taken up by several scholars, fullest by Doerfer 1993. We will come back to the question of relative dating within Uygur further on in this section.

3) 11th century Turkic texts from the Qarakhanid state: In Arabic writing, the *Qutadgu Bilig,* a poem consisting of six thousand odd couplets by Yūsuf the Chamberlain,[12] and the *Dīvānu luġāti 't-Turk,* an Arabic-Turkic lexicon and encyclopedia featuring morphological, derivational and dialectological notes, by Maḥmūd of Kāšġar.[13] Land sale documents in Uygur writing found in Yarkand[14] are the only direct Turkic Muslim ms. evidence from the period, since the three QB mss. and the only ms. of the DLT are not autographs but somewhat later copies. Maḥmūd also quotes forms from dialects other than his own, the DLT thus serving as earliest evidence[15] for other early varieties of Turkic. Material from other varieties is, in general, excluded from the present work: Qarakhanid grammar is close enough to Uygur grammar to make a single description for both corpuses meaningful, which is not necessarily the case with other material quoted in the DLT. Features of

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[11] This term (used by Röhrborn and Laut in a number of their publications at least since 1984) is, I think, unfortunate, as it is misleading to outsiders: Greek κοινή means 'common'; *koinè diálektos* was the name originally given to the relatively late, post-classical variety of Greek which was mostly based on the Ionian dialect and replaced practically all the (other) Greek dialects to serve as common language not only to Greeks but also to others who came under their sway or adopted their culture. The variety of Uygur which is, I think, better just called 'Classical' or 'Standard' is a stage in the development of the language and of its spelling when it had established relatively strong and clear norms. The language apparently was, at this stage, spoken more or less as it was written, which was probably no longer the case for Late Uygur sources.

[12] Edited by Arat (1947), translated into English (with important notes) in Dankoff 1983. Tezcan 1981 will also be important for a better edition in the future.

[13] Dankoff & Kelly 1982-85 is an edition of the Turkic (transcribed and transliterated), couched in an English translation of the Arabic parts of the text.

[14] Erdal 1984.

[15] The reliability of the DLT cannot be wholly taken for granted in this specific matter, as Maḥmūd was not, of course, a field researcher in the modern sense; but his evidence does seem convincing. Most of the information supplied by Kāšġarī on the dialects has not yet been matched with modern and comparative data and there is as yet no conclusive investigation of this question.

other dialects are not, however, disregarded; e.g.: The Oguz cognates of *äšgäk* 'donkey', *buš-gak* 'asthma' and the dative suffix *+kA,* which lack the velars of the quoted forms altogether, are certainly relevant for our view on the shape of these Old Turkic elements; they show that *äšgäk* and *bušgak* must have had *g* and not *k* although *k* would have been a possible reading of what is documented, and that there must, beside *+kA*, also have been an early variant dative suffix *+gA*. *koymaŋïz* and *kïymaŋïz*, which are in DLT fol.289 quoted as Oguz and Kïpčak forms for the negated 2nd person plural imperative, are relevant for Turkic in general, because they show that /d/ > /y/ had taken place in at least some Early Turkic dialects already in the second half of the 11th century, and that *-(X)ŋ-lAr* had not been generalised to all early dialects.

The legend of Oguz Kagan, which is considered to be in Old Turkic e.g. by Ščerbak 1961 and in the DTS, is written in a form of Chagatay, a stage of Turkic which is quite different from Old Turkic and much later. Buyan Ävirmäk, a text stretch found at the end of the 18th century Petersburg ms. of Suv, was added at a very late stage and cannot be called 'Old Turkic' either. Nor can the 12th century Atabatu 'l-Haqā'iq, which should be considered to belong to Middle Turkic though its composition took place in the Qarakhanid realm. A weakness of descriptions of Old Turkic by Soviet scholars was that they described Uygur together with such Middle Turkic sources, taking all of them to be expressions of a single language. Among the three mss. of the QB, ms. A is from the Timurid period; its content is not evidence for the text except when considered together with mss. B and C. R.R. Arat had, in 1947, published an edition of the QB based on all three mss.; not knowing this edition or disregarding it, Soviet scholars quoted each of the three mss. as if each were a Qarakhanid source by itself.[16]

The three source groups mentioned constitute all the early written remains of Common Turkic[17] in so far as they can be read at present: Many short inscriptions discovered west of Chinese Turkestan and South Siberia, e.g. in the Altay region, are hard to decipher: Where

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[16] Thus also in the DTS. Such errors can have long-lasting influence. E.g., Anderson 2002 gives *kir-* as an inchoative auxiliary verb, quoting a phrase '*sevä kirsä'* for "KB II 42" from Ščerbak 1961: 153. It turns out that this is a reference to what ms. A alone has in QB 403, while the other ms. extant for this passage has something quite different. There is no other 'evidence' for *kir-* as auxiliary in Old Turkic.

[17] I here use 'common' in the sense of 'ordinary', to refer to what Schönig 1997: 119-120 calls 'Norm Turkic'. Schönig there uses 'Common Turkic' to refer to the diasystem + 'diadictionary' which is the lowest common denominator of all Turkic languages; this is a concept for which I have no use and which is *not* what I have in mind. The term 'Norm Turkic' sounds, I feel, too normative.

aberrant forms have been read, there is the possibility of misreadings. Turkic words and phrases found in sources in Bactrian, Sogdian or other Indo-European languages of Asia sometimes constitute useful material on what is clearly the same language. Non-Bolgarian forms of Middle Turkic appear to be relatively close to Old Turkic, allowing for dialect differences mostly already attested in the DLT. Their predecessors may thus not have been very different from Old Turkic, though the language of most Middle and Modern Turkic sources does not go back directly to Old Turkic as we have it documented in the corpuses mentioned above. If some modern Turkic languages seem much too aberrant to go back to dialects closely akin to Old Turkic, this is often due to substrates or adstrates.

Old Turkic is not identical with Proto-Turkic, nor is it the ancestor of Common Turkic in the sense that (Vulgar) Latin is the ancestor of the Romance languages. *bän* 'I', e.g., is still retained in Modern Turkish, but the Bilgä Kagan and Köl Tegin inscriptions from the banks of the Orkhon river have only *män*, the assimilated secondary form. *buyur-* 'to command' has in Old Turkic (including Orkhon Turkic) been replaced by *yarlï(g)ka-* but lives on in practically all Turkic languages outside Siberia and is the source of the Old Turkic title *buyruk*. *ud-* 'to follow' survives only in the Oguz languages, but the adverb *udu* 'following, after', which is common in Old Turkic, must come from it.[18] Various Common Turkic features have dropped out from Old Turkic: The *-gAn* participle, which is alive in practically all Turkic languages, had disappeared from most of Old Turkic except in a few petrified forms (and in some sources written in Sogdian writing); the *-gAy* form, which is used as future or with content related to epistemic mood in a great number of Turkic languages including Uygur, had disappeared from Orkhon Turkic, though there are some examples in the Yenisey inscriptions. Proto-Common Turkic would also have had an element related to Turkish *değil* for negating nominal predicates. Nor can *-(A)lIm* for the 1st person plural hortative have been primary, since a number of Common Turkic languages also have *-(A)lI* and *-(A)lIŋ* as 1st person exclusive or inclusive or some such meaning; the additional *m* clearly comes from general 1st person marking and *-(A)lI* may have been the original form.[19] Extending our scope of 'Old Turkic' beyond

[18] In view of its limited documentation, *ud-* could, in principle, also have come from *udu* by back-formation.

[19] This is a matter mentioned also by Doerfer 1975-76: 9, who writes: "Atu. is, so to say, not the grand-father of all modern Ctu languages but their grand-uncle. It shows some specific (dialect) features."

the Orkhon inscriptions, we find additional secondary features: e.g. vowel roundings after onset *b* in words such as *büt-* 'to come to an end, be perfected', *buzagu* 'calf' or *bulït* 'cloud' in runiform mss., whereas a number of modern Turkic languages have the original unrounded vowels; also, e.g., words starting with *m* < *b* when the next syllable has a nasal. Verbal forms like *kod-ma-ŋ-lar* 'don't put (pl.)' are also secondary, as is the alternative form in *-mA-ŋ-Xz* which, as already Kāšġarī says, was used by the Oguz. The ancestor of Common Turkic (as a theoretical construction) was, in any case, probably quite similar to Old Turkic in many respects. Old Turkic must therefore be taken note of as a very central ingredient of any reconstruction of Proto-Turkic (the ancestor, that is, of Common Turkic, Khaladj, Chuvash etc.). Another important source for this reconstruction is evidence from Mongolic.

Due to some of its characteristics (e.g. the hortative in *-(A)lIm*, the future in *-dAčI* instead of *-gAy*), Doerfer 1975-76a: 83 thought that Orkhon Turkic was especially close to Oguz Turkic;[20] other scholars e.g. Tezcan) have also subscribed to this view, which deserves further consideration.

The three corpuses mentioned above represent a coherent group of fuzzy dialects differing most in the lexicon (as they belong to different cultural domains), certainly also in morphology and in some ways also in phonology. Syntactic differences may in part be due to the fact that the corpuses contain different textual types, but also reflect the gradual Turkification of much of the population using Uygur, and historical development. Translations, which constitute most of our corpus 2 (though by no means all of it), were, in particular, carried out by bilingual committees. Corpuses 1 and 2 are not dialectally homogeneous; phonic and grammatical differences between the corpuses are probably not greater than those found within them. Geographical dialects can hardly be worked out within group 2, as mss. for public use would travel and be copied by scribes differing in dialect;[21] personal documents are relatively short and rather repetitive. Phonic and morphological differences are not as great as to necessitate distinct descriptions for different texts or text groups. Nevertheless, our

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[20] Johanson 1998: 85 writes about the language of the Orkhon inscriptions: 'Though it exhibits some features that are later typical of Oguz, it may well be taken to represent a Common Turkic that has not yet split into Oghuz, Kipchak and Uyghur.' This is clearly mistaken.

[21] Some features possibly characterising the dialect of Khotan are mentioned further on in this section. See Doerfer 1993: 3 and the reference given there to work of Bazin for the exact coordinates of places where mss. and inscriptions were discovered.

description cannot pretend to be based on a homogenous corpus but will, where deemed appropriate, include observations on dialect variation and diachrony as well. We will straightway mention phonetic, phonological, morphological and syntactic features with which scholars have tried to characterise the variation between the different texts; detailed discussion of these features will then take place in the different sections of the grammar dealing with the elements affected. The differences within Old Turkic are by no means greater than e.g. within Old Greek.

There are, however, some clear differences even between the runiform inscriptions from Mongolia: Tuñ has *bän* as independent pronoun but uses *män* within the verb phrase,[22] while KT and BQ have *män* everywhere; ŠU from the Uygur kaghanate again has *bän* as independent pronoun, however, and Taryat (also Uygur kaghanate) even has *bän* following a verb form. These differences can be qualified as 'progressive' vs. 'regressive' as they do not fit into the 'earlier' / 'later' scheme which Doerfer 1994: 111 tries to apply to them. He there (p.109) also shows that it is the KT and BQ inscriptions (and ŠU from the Uygur kaghanate) which most often do not leave /e/ implicit but write it as *i*, whereas the earliest inscriptions Tuñ, Ongin and KČ on the one hand, the Uygur inscriptions Tariat and Tes on the other, practically always leave it unexpressed. It is again (same work, p.110) KT, BQ and ŠU that always write /e/ out as Y in open syllables, and again KT and BQ which show the sound change [yä] > [ye] in the beginning of the words *yäg* 'better', *yägirmi* '20', *yär* 'place' and *yäti* 'seven'.

Several linguistic criteria can serve to distinguish between language forms within Uygur, either as dialects or as historical stages. The fate of early Old Turkic /ñ/ has been much discussed in the literature and is here dealt with in section 2.33; all agree that its retention as a distinct phoneme (as in Lena Turkic) is archaic. It converged with /n/ in the Argu dialect as documented by Kāšġarī, but there are hardly any traces of such a feature in any variety of Uygur: It will be found in section 2.33 that '*anïg*' < *añïg* 'bad' and '*könür-*' < *köñür-* 'to burn (tr.)', given as only examples in the literature for NY turning to N, can in fact be read as *añ(ï)g* and *köñür-* in all instances referred to. I have found a single possible exception, mentioned below. In most Uygur texts, all words containing /ñ/ in runiform sources appear with /y/. Where Uygur texts have both NY[23] and Y in these words, such as *kanyu* ~ *kayu*

[22] This distinction later led to the generalization of the person category in verb forms.

[23] Small capitals are used for transliterating Semitic alphabets.

'which' both found in the (early) London scroll of the Säkiz Yükmäk Yarok (TT VI), we take either the language to have been in transition to the progressive variant with /y/, or scribes whose language had already lost /ñ/ to have made copies from mss. which still had /ñ/, introducing the change sporadically. In Oguz Turkic /ñ/ becomes /yn/ (with a vowel intruding between /y/ and /n/ when demanded by syllable structure) but this does not (except in the word *koñ* > *koyn* 'sheep') happen in Uygur. All of Uygur can therefore be characterised as a bundle of *y* dialects, like many of the Turkic languages today; the runiform mss. are a possible exception, and there is the exception of some mss. in Sogdian script, where we seem to find a clear instance of *anïg*; see further on in this section for that. If, as pointed out by Röhrborn 1983, the Sängim ms. of Maitr exclusively has /ñ/ > /y/ but on the other hand all the characteristics of early Uygur texts, this should come as no surprise: The copyist of this ms. was more efficient than e.g. the one of the London scroll of TT VI in doing away with instances of /ny/; had the latter's personal language not already undergone the process, he would not have made the replacement at all.

Additional characteristics which are used for the distinction between dialects or between pre-classical and classical sources (depending on the viewpoint) are the presence of the converb suffixes *-(X)pAn*[24] or even *-(X)pAnXn* instead of or beside *-(X)p* (all dealt with in section 3.286); the use of the case ending *+dA* and not *+dIn* to express ablative meaning (discussed in section 4.1106);[25] the inscriptional use of the projection participle in *-sXk* where all mss. except the Xw use *-gU* and *-gUlXk* instead (see all three in section 3.284);[26] the appearance of low unrounded vowels in the genitive, instrumental and accusative[27] case suffixes and in the accusative allomorph for the 3rd person possessive

[24] A dash before a suffix signifies that the base is a verb stem; the plus sign signifies that it is not. Vowels placed in brackets are dropped when the base ends in a vowel; consonants in brackets, as in *+(s)I(n)*, are dropped when following upon consonants or under other conditions specified in the grammar. Capital letters in transcriptions of suffixes refer to archphonemes, realizations being specified in the phonology; see section 2.51 for the realizations of /X/, /U/ etc. The letter X refers to a vowel archphoneme in transcriptions but (in slightly smaller font) to a Semitic consonant letter (*ḥeth*, representing /k/ and /g/ in back vowel contexts) in transliterations. [x] is a velar fricative.

[25] The presence of the variant *+dAn* is clearly also relevant to chronological and dialectological questions.

[26] In the runiform inscriptions *-gU* appears only in one or two lexemes while *-gUlXk* is used twice in a proverb; these forms would have survived from an even earlier stage of the language.

[27] This suffix and other suffixes containing /g/ get lowered also in texts which are by no means early, by adjacency with this consonant; see section 2.402.

suffix, in the 1st and 2nd person singular and plural possessive and perfect suffixes, the 1st person singular and plural and 2nd person plural volitional suffixes, the converb suffix *-(X)p*, the formatives *+lXg* and *+sXz* and the passive suffix *-(X)l-,* which all generally have high vowels (section 2.24);[28] the appearance of /š/ as *s* in one ms. (discussed in section 2.35); rounding in verbal inflexional affixes in some mss. in Sogdian script and two others, discussed further on in this section; the appearance of the instrumental suffix as *+(X)n* and not as *+(I)n* (q.v. in section 3.124); the non-nasal shape of *-dXŋ* as e.g. *käl-tig* 'you came' in PañcFrag 192 which accords with similar realisations of /ŋ/ as /g/ in runiform inscriptions (as discussed in section 2.34); the distribution of the participles in *-(X)glI* and *-(X)gmA* (in productive use only in early texts; see section 3.282) and the (mostly agentive) forms ending in *-gUčI* and *-dAčI* (discussed in sections 3.113 and 3.282): The Orkhon inscriptions have *-dAčI* (*-mAčI* in the negative) as future suffix while the rest of Old Turkic has *-gAy*. Opinions have varied on whether differences concerning such criteria may be indications of dialects[29] or of different stages of the language or both. Doerfer 1993, who devoted a monograph to the topic of the dating of Old Turkic, uses 30 characteristics for this purpose, some of them graphic (see section 2.1), or in the phonological, the morphological and the lexical domains.

Many Manichæan texts appear to be pre-classical, but the Pothi book (TT III etc.) and one or two other mss. have clear signs of lateness. Among Buddhist texts, the Sängim ms. of the Maitr, the London scroll of TT VI, BuddhBio and another section of a Buddha biography edited in U II 4-7, possibly the KP text[30] and (not noted hitherto) the

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[28] The lowering appears also in *bar-am* 'livestock' formed with the formative *-(X)m*, attested in M III nr. 6 III r7, in a ms. belonging together with M I 7-17 and ManErz I. The feature of lowering is assigned to the Oguz dialect by Kāšġarī but in Uygur it is a variable characteristic of early sources where /a ä/ are not conditioned by specific adjacent consonants. If Kāšġarī is right this may mean that there was an Oguz influence on early texts, or that the Oguz were relatively numerous among the Manichæans. It would also go well with the idea that there is a special Oguz – Orkhon Turkic connection, as Orkhon Turkic influence on the language of the inscriptions of the Uygur Kaghanate is obvious.

[29] One should here remember that the distribution of dialects need not be geographic but can also be linked to communities. The Arabic dialects spoken in Baghdad in the first half of the 20th century by Muslims, Christians and Jews, e.g, were quite distinct; in one town in Western Persia Jews and Christians spoke two dialects of Neo-Aramaic which were not even mutually intelligible.

[30] This ms. appears to be, more than some other sources, a late copy of a quite early text by a rather sloppy copyist, who not only made a number of mistakes but also introduced some very late forms towards the end.

Vairocana fragment T I D 200 (Mainz 774) last edited by Zieme in a footnote in *AoF* VIII (1981): 242 show signs of being early. BuddhKat was by its editors Maue & Röhrborn declared to be pre-classical because it has low vowels where the standard ms. write high ones and has several examples of the *+dA* form serving in ablative meaning. On the other hand *-sA* as conditional suffix instead of *-sAr* and *käräk* 'necessity, necessary' instead of *kärgäk* as well as the haplology of syllables containing /r/ are late or at least progressive features. Vowel lowering in BuddhKat has no significance in this matter, however, as it takes place only beside /g/ and /r/. Whether *+dA* never serves in standard Uygur texts in the constructions found in BuddhKat needs to be checked. Cf. the following: The Maitr (both major mss.) shows a number of ablatival locatives, one instance of the converb in *-(X)pAn* and two in *-(X)pAnXn* (the Hami ms. has at least two additional ones of the latter), a few instances each of *-(X)gmA* and *-(X)glI* and, as a spelling feature, a number of instances of /ŋ/ spelled in both front and back contexts with K alone. The pre-classical features of the London scroll of the *Säkiz Yükmäk Yarok*, edited in TT VI, are the lowering of vowels, six instances of *kanyu* 'which' beside 12 instances of *kayu*, more than 20 examples of *anïg* (presumably to be read as *any(ï)g*; cf. the end of section 2.33) and of a derivate, instances of the superfluous *alef*, the *+dA* form used as ablative and productive use of *-(X)glI*.

Some fragments of mss. written in Sogdian script (edited by D. Fedakâr) clearly show a distinct dialect: They have some loss of pronominal *+n+* (e.g. *san+ï+ča*) as found in Eastern Middle Turkic and in the Southeastern group of modern Turkic languages and the phrase *öl-gän+dä kurtul-* 'to be saved from dying', with the participle in *-gAn* used as event noun. A conspicuous feature of these fragments is the vowel rounding in inflexional suffixes when adjacent to a labial consonant (*kurtgar-dum*, *tap-un-tïlar, ämgän-üp; tak+umuz*, *sï-dumuz, bačama-dumuz*); cf. section 2.402 for more details on this process. The possessive suffix *+XmXz* is replaced by *+UmUz* and the preterit suffix *-dXmXz* by *-dUmUz* also in one ms. of the Xw, and the ms. Pelliot Ouïgour 2, HamTouHou 18,7 has the forms *tilädümüz istädümüz*. This latter is a letter written in Khotan (as the text says); that particular Xw ms. and the mss. in Sogdian script could therefore also reflect the Khotan dialect.[31] On the other hand, *anïg* 'bad', damaged but visible in

[31] *ävigä* 'to his home' in HamTouHou 18,4 is not necessarily an instance of the loss of pronominal *n*, as 'WXLYK' for *oglïŋa* 'to his son' in l.10 shows that the ms. spells /ŋ/ as K: /g/ would have been spelled as X in a back-harmony word. The genitive form *minig* for *mäniŋ* 'mine' in l.6 probably has the same explanation. The 2nd person imperative

a fragment in Sogdian script, shows that what we have here is a rare instance of the so-called *n* dialect (see section 2.33). Both *-dUm* and *ñ* > *n* are, according to Kāšġarī,[32] characteristics of the speech of the Argu; these Sogdian script mss. may therefore also represent this dialect. Another noteworthy feature of the Sogdian script mss. are several examples of an extended form of the 3rd person imperative (e.g. *artamazunï*), found also in the QB.[33] We know that Argu was spoken in Balasagun, and Yūsuf, the author of the QB, was born in this town. This as well should therefore be an Argu feature. A further feature shared by the Sogdian script mss. with the QB are the fused impossibility forms (*alumadï* < *alï umadï, alkumaz* < *alka umaz*). Balasagun was in West Turkistan; this proximity to the original homeland of the Sogds *may* explain their Sogdian palæography and spelling characteristics.

On the other hand, the Sogdian script fragments have also retained the pre-classical feature of sporadic and unconditioned vowel lowering. Laut 1986 considers a Buddhist text to be pre-classical also when it has Indian loans in Sogdian shape and adds a further criterion for early dating: the introduction of superfluous *alefs,* not in the onset and unjustified through any likely pronunciation before vowels within words; e.g. *yig'it* 'young man' or *av'uč* (the name of a hell called *avīci* in Sanskrit). For these two reasons he also adds the SP to his list of pre-classical texts, although it lacks all other criteria. Superfluous *alef*s in a Manichæan text and in the Sängim ms. of the Maitr are given in Laut 1986: 69-70; instances in mss. in Sogdian script are listed by Fedakâr in *UAJb N.F.* 10(1991): 93-94 (to be used together with the glossary in *UAJb N.F.* 14(1996): 196-201 and the transliterations). The lowering of unrounded high vowels is apparently equally common in the Sängim and Hami mss., though not necessarily in the same words.

Gabain in several places expressed the view that the texts written in Brāhmī script constitute a dialect of their own. According to her they are characterized by (among other things) *p* in the onset of words and

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plural form read *istäglär* in the same line is not necessarily an instance of /ŋ/ > /g/ either, as it can also be read as *ist(ä)ŋlär*.

[32] The DLT (fol.504) ascribes the pronunciation *bardum*, *käldüm* (vs. *bardam* among the Oguz and *bardïm* among the other Turks) to the dialect of the Argu.

[33] Gabain 1976 expresses the view that this °*I* is the possessive suffix but there seems to be no sense in that. I could imagine that it is a truncated *ïd!* 'Let go!', comparable to English 'Let him do this'. *ïd-* also serves as actionality auxiliary for energetic action which became morphologised in some modern languages, and should also be behind the °*I* which we find at the end of imperative forms of certain Khaladj verbs. As Doerfer has shown in various places, Argu as described in the DLT shares several linguistic features with Khaladj.

by *o* in non-first syllables. These sources do indeed seem to use *p* and *b* indiscriminately in onset position; however, this may have been caused by influence from the Uygur writing system, which spells all [b]s with the letter P. As for *o* and *ö* in second or subsequent syllables, that appears also in texts in Tibetan writing like the catechism from Dunhuang (BuddhKat) and in the hippological glossary in southern Brāhmī (Wordlist) and reflects, we think, general Uygur pronunciation: The Uygur, Manichæan and runiform writing systems do not distinguish *o* from *ö* and *u* from *ü* in any case. Are there any explicit differences which distinguish Brāhmī texts from others? Such is, for instance, the syncopated spelling of the suffix *+(l)dUrXk*, which appears as *+(l)druk* in *sakaldruk* 'throat strap on a headstall' and *kömüldrüx* 'breast strap' in Wordlist, and *boyontrok* in TT VIII A (Northern Brāhmī): Sources in both the Uygur and Arabic scripts consistently spell the suffix with explicit W after the alveolar. There is an instance or two where a stem-final *i* appears as *ö* in a converb form in *-(X)p*. BuddhKat, a quite early text in Tibetan script, has other relevant characteristics: the conditional in *-sA* instead of *-sAr*, otherwise documented e.g. in Uygur medical texts (which were presumably written more carelessly than, e.g., religious texts), the haplological dropping of syllables featuring an /r/. BuddhKat and three medical texts in Brāhmī have *käräk* instead of *kärgäk*, while even very late texts in Uygur script practically always write *kärgäk*. *käräk* is also what we find in Qarakhanid sources and also as a loan word in Mongolian, already in the (13th century) Secret History. Rather than pointing at a different dialect, such traits show that texts in Indic scripts stayed outside the written norm and reflected characteristics of the spoken language; the *g* of *kärgäk* probably dropped away from the dialect(s) underlying Uygur already in the 10th century.

As for the syntactic characteristics of Brāhmī sources, these appear to emanate from the fact that some of them follow the syntactic structure or just the word order of their source text, and sometimes even its morphological structures[34] rather slavishly. Unusual syntax need not, on the other hand, always be the result of direct copying even in translated texts. In Christian texts, for instance (e.g. the first text in U I or the Christian one in ChristManManus), the finite verb is less often at the end of the sentence than in other sources and relativisation is more right-branching with conjunctional particles than left-branching with participles. These features may, however, also have been characteristic

[34] Late Sanskrit, the source of some of these texts, is prone to extensive compounding; moreover, it expresses even predicates in a preponderantly nominal manner.

of spoken language, Central Asian Christians possibly being less bound by the written norms of mainstream society.

In general, the degree of the slavishness with which Uygur texts follow their sources is a parameter worth watching in all texts. However, quite a number of Uygur texts are not translations but ad hoc communications (e.g. letters); others are original creations or paraphrases (expansions or summaries), and even translations often contain interpolations and alterations of the translator.

Criteria for lateness are *aŋa* and *muŋa* as datives of *ol* 'that' and *bo* 'this' instead of *aŋar* and *muŋar* (discussed in section 3.132); the introduction of helping vowels beside /r/ and metatheses mostly involving /r/ such as *ädräm* < *ärdäm* 'virtue' (section 2.406); the appearance of *idi* 'master' as *iä* or *igä*; the change *yarlïgka-* 'to command etc.' > *yarlïka-*; the change of the causative formative from *-Xt-* to *-It-* (section 3.212) and the change of the vowel in the converb and aorist suffixes used with this formative from /I/ to /U/ (see section 3.233 and especially Erdal 1979b and 1986 for this and for the next item); change in other aorist forms such as *älit-ir* 'he/she leads' > *el(i)tür*, *bil-ir* > *bilür*, *al-ïr* > *alur*, *ögir-är* > *ögirür* etc.; the change from accusative to nominative when postpositions govern nouns with possessive suffixes or pronouns (section 4.21); the replacement of the accusative suffix *+(X)g* by its pronominal counterpart *+nI* (section 3.124); the regularisation in the negative conjugation found in *-mAčI* (future) > *-mAdAčI* and *-mAdOk* (perfect and evidential) > *-mAmIš* (section 3.232); *kärgäk* 'need', *äšgäk* 'donkey' > *käräk*, *äšyäk*; *-sAr* > *-sA* as the conditional suffix (section 3.287); the change of the imperative particle from *gIl* to *gUl*;[35] *birlä* 'with' > *bilä(n)* (section 3.32); *burun* 'nose' > 'before' (attested e.g. in *burun+kï* 'earlier' in Suv); counting by the higher decade replaced by counting by the lower decade (section 3.14), and *ayïg* 'bad' > *ayï* when used with the meaning 'very'. One other conspicuous matter is the free alternation in late texts between *t* and *d*, *s* and *z* and, in the scripts where it can be observed, *k* and *g* replacing earlier (e.g. runiform) adherence to either the voiced or the unvoiced consonant.[36] Doerfer 1993: 115-119 mentions that this

[35] We take *-gUl* to have fused from *-gU ol*, a marker of impersonal mood, but in some of its instances it appears in parallelism with *gIl*; the matter is not completely clear.

[36] As Zieme 1969: 23 notes in connection with the Pothi book where such confusions are especially prominent, they are referred to as 'Mongolisms' because they generally appear during Mongol domination (which is rather late as far as Old Turkic corpus is concerned); he does not, however, draw the conclusion that the Pothi book must be late. Occasional confusions such as *sägiz* for *säkiz* 'eight' in the Xw are called "irrtümliche

phenomenon does not occur in Qarakhanid and explains why it must be due to contact with Mongolian and the way that language was written. These processes did not all occur simultaneously, nor did they all automatically apply to texts we know to have been late: Knowledge of the standard language clearly lingered on into Yuan times, to varying degrees with different individuals. We have already noted the rather early appearance of the truncated variant of the conditional suffix *-sAr* and of *käräk* as 'necessity, necessary' in the catechism in Tibetan writing. The fact that medical and astrological texts have such phenomena more than late religious texts shows that they mark progressiveness, supressed when writing or copying something venerable.

What should be kept in mind in this connection is that the spelling of written texts, especially when adhering to a norm, rarely exactly reproduces one to one the pronunciation of the people who write them; fluctuations often reflect a conflict between the means put at the writer's disposal by the writing system and how he thinks the words *should* be pronounced, as well as between *his* pronunciation and traditional spelling. If the London scroll in TT VI 89-90 shows thrice the spelling *ärkligin yorïglï* and once the spelling *ärkligän yorïglï*, the chances are that the scribe thought that 1) consistence was not important, 2) neither spelling the word with *alef* nor spelling it with *yōd* was fully appropriate for his purpose (which may or may not have been directly linked to what he would be pronouncing). We know from phonetic recordings that pronunciation can also fluctuate freely, but this is not the only determinant of spelling. Some of the traits thought to be phonic may be due to graphic fluctuations preceding standard spelling, or to texts outside the spelling traditions. Laut's (1986) explanation for the inconsistent and uneven nature of the evidence is that the texts as we have them represent the result of alterations by copyists under the influence of their own dialect.[37] I agree with this and have said as much in connection with the *ñ* > *y* process.

Uygur texts which have Arabic, New Persian or Mongolian loans or change /d/ to /y/ e.g. in *kaygu* < *kadgu* ,sorrow', *kayït-* < *kadït-* ,to

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Schreibungen". Zieme explains their generally rare occurence in Manichæan texts by the traditional care which the Manichæans showed in the production of mss..

[37] Pp.61-62. He thinks the changes were deliberate, arguing against R.R.Arat who considered them to be accidental. The correction from *bašlag* to *bašlïg* visible in the ms. in Maitr 73v20 is no proof, however, as the copyist may, in this particular case, have been trying to prevent a misunderstanding: *baš+lïg* could have been misunderstood as *bašla-g*, which also exists.

return (intr.)' should not be considered to be part of the Old Turkic corpus: Proto-Turkic /d/ has been preserved as an alveolar in some Turkic languages to this day, so that the presence of the feature /y/ < /d/ (when preceded by a vowel in the same stem or suffix) is a dialect characteristic no less than a sign of lateness: It is, in fact, documented as such already by Kāšġarī (fol.289), who states that the Oguz and Kïpčak say *koy-* instead of *kod-*. InscrOuig, an Uygur inscription from the year 1334, is an example for a text which has Persian and Mongolian loans as well as this sound change.

Sources range from imperial inscriptions to personal letters sent to family members and graffiti scribbled by travellers on rocks. After the Mongol invasion, the differences between the language of texts intended for public and especially for religious use and that of the private documents grew, the former being conservative and showing more of a dependence on foreign sources. For the period described, it appears that the progressive texts are quite close to the spoken language,[38] the vital vehicle of an expanding society, quickly replacing the last vestiges of local Iranian and Tokharian vernaculars in all spheres of life. Stylistic differences and registers are discernible: Personal letters, medical texts and scribblings represent a colloquial language with consonants and morphology progressive in a few points, a few consonant elisions and word order even freer than otherwise. More formal language was, however, just as 'real' in its use. The distinction between registers does not, of course, apply only to an overall classification of sources, but also to the presentation of utterances within narrative texts, to the polite reference to the addressee in the plural, to lexical devices, to address verbs marked on the politeness scale and the like.

The texts show some code switching: When a stretch in a non-Turkic language is included in an Old Turkic text, we do not consider it to part of our corpus if it contains a predication, i.e. if it is a clause, a sentence or more. One example is the Parthian sentence *Man astar hirza* ‚Forgive my sins!' repeatedly found in the X^{w}āstvānīft. This text is the Manichæan confession prayer; pronouncing the sentence is part of a ritual and not meant to serve communication with humans. A similar case are *dhāraṇīs* (incantations) included in Buddhist texts, which make no sense in Uygur (and sometimes not in any other language either). Another situation arises when communicating individuals are bilingual

[38] I see no reason to agree with Tenišev 1979 and scholars following his views on the matter, who think that the language spoken by the Old Turkic population is substantially different from their written language.

in the same two languages; this makes switching possible from one into the other. Examples are the Turkic–Sogdian texts edited by Hamilton & Sims-Williams or Turkic–Chinese land sale contracts published recently. Code switching will be relevant for Old Turkic syntax in case it happens within one sentence, if, e.g., a foreign clause is included in an Uygur sentence. Foreign stretches are not, in any case, relevant for Old Turkic phonology: The /h/ which we find in the X^{w}āstvānīft formula, for instance, cannot be considered to be one of the Old Turkic phonemes. The situation is different for loan words: *lenxwa* ‚lotus‘, e.g., was clearly used freely in Uygur; the onset /l/ and the cluster *xw* at the syllable onset must therefore have been within the competence of users of this language, at least for the register concerned, and assuming the word was pronounced as it was written.

In naming the Old Turkic corpus or parts of it, scholars' practices sometimes differ from our formulation. For some, Old Turkic‘ is only the language of the Orkhon inscriptions and does not include any Uygur or even the runiform inscriptions of the Uygur Steppe Empire.[39] Others group the texts of the A dialect together with the inscriptions, calling this ‚Türkü‘ or ‚Türküt‘. Some exclude Qarakhanid from Old Turkic, assigning it instead to Middle Turkic. The view that the variants of Old Turkic as listed above should be taken to be alike unless explicitly shown to be different has become the standard among scholars specialising in Old Turkic. This view is not shared by all scholars, however: In his (1980) review of Tekin 1968, e.g., Benzing proposed that the verb *okï-* 'to call etc.' should in Orkhon Turkic be read as '*okkï-*' because the velar retains its voicelessness in the northwestern Turkic languages (where single voiceless consonants become voiced between vowels). No Uygur source writes '*okkï-*', however, although Uygur does not follow the Orkhon Turkic practice of spelling geminates as single consonants: Benzing did not consider the possibility that Proto-Turkic may have had **okkï-* and that the geminate could have been simplified in Old Turkic *including* Orkhon Turkic. This was not *necessarily* the case and the Orkhon Turkic verb may indeed have been pronounced with a geminate, left implicit in the writing. This would mean transporting Proto-Turkic into Old Turkic, however, and I think scholarship should better assume coherence among the (rather close) dialects of Old Turkic in every matter for which the data do not prove it to be otherwise. The present work tries, among other things, to provide

[39] Thus e.g. Johanson 1979 : 8. The fact is that none of the sub-corpuses is really homogeneous.

such distinguishing data; that, e.g. *-yOk* is not used in runiform inscriptions, used in the Manichæan texts just as participle and put to general use only in Buddhist texts. This type of remark, or the reference to phenomena as 'late' or 'early', are scattered throughout the work. The discovery of relevant features for Old Turkic text classification is still going on, and we have not attempted any synthesis on this topic here.

1.3. *History of research*

1.31. Sources

We can look back to more than one century of research into Old Turkic, initiated by W. Radlov's edition in 1891 of the QB ms. in Uygur writing[40] and especially by W. Thomsen's decipherment of the runiform script in 1893. Runiform inscriptions had been discovered by travelers to Siberia centuries earlier, and then by Fins exiled to that country and by Russian archeologists; they were made accessible to the scholarly world in 1892, through drawings and facsimiles in Finnish and Russian publications. In the first 50 years of research, runiform inscriptions were edited by Thomsen himself, by W. Radlov, S.E. Malov, G.J. Ramstedt and others. Orkun 1936-41 is a collected reedition of all this material. A great many short runiform inscriptions were then discovered or rediscovered, edited or reedited in the Soviet Union, mostly by D.D. Vasil'ev, I.L. Kyzlasov, S.E. Kljaštornyj and I.V. Kormušin. Lists of runiform inscriptions can be found in Vasil'ev 1976/78 and Sertkaya 1984.

The Uygur corpus of Old Turkic was made available by Russian, Japanese, German, British, French and Swedish expeditions to East Turkestan and Gansu, the greatest number of mss. reaching Germany. The writing itself was known in the West at least since Klaproth 1820. The task of editing the sources discovered since the turn of the century is still going on, the first editors being F.W.K. Müller, A. v. Le Coq, W. Bang, V. Thomsen, W.W. Radlov, P. Pelliot and G.J. Ramstedt.[41] Between 1920 and 1970, Uygur texts were edited foremost by A.v. Gabain, and also by S.E. Malov, G.R. Rachmati (subsequent name R.R. Arat), T. Haneda, M. Mori, N. Yamada and Ş. Tekin. In recent decades

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[40] The ms. edited by Radloff is actually the latest of the three existing mss. of this source and shows certain characteristics of Middle Turkic. Even this ms. is, however, certainly closer to Old Turkic than Chagatay sources, which Thomsen and other scholars otherwise had as guidance for their texts.

[41] Scholars are listed more or less in the order of their importance in this domain.

the activity of editing Uygur mss. (mostly in Germany, but also in Japan, France, Turkey, the Soviet Union, the United States, China and Finland[42]) expanded greatly; published dictionaries (see below) simplified the work, knowledge of the language was deepened, texts were routinely published together with their facsimiles and a growing number of source texts was identified.[43] The publication of facsimiles is becoming less necessary as the great majority of Uygur sources is now becoming accessible on the internet.

C. Brockelmann and B. Atalay contributed much to the constitution and interpretation of the DLT, the former writing several papers on various aspects of this source and presenting its lexical material in dictionary form, the latter editing the text and publishing it with index and facsimile. R.R. Arat edited (1947) the three extant mss. of the QB in what attempts to be a critical edition of this extensive source. Dankoff & Kelly (1982-85) presented the definitive re-edition of the Turkic elements in the DLT, translating the Arabic matrix text into English; Dankoff's (1983) translation of the QB is, in many points, a highly successful reinterpretation of the text.

1.32. The Lexicon

Most Uygur texts published until the 1970s were accompanied by glossaries. Brockelmann 1928 is an index to the DLT, an invaluable source for our knowledge of the Old Turkic lexicon in general. This work was useful for scholars working on Uygur and inscriptional sources, though based mostly on the faulty edition of Kilisli Rifat (1917-1919). This makes it inferior to Atalay's glossary to his re-edition, which itself is now superseded by vol. 3 of Dankoff & Kelly 1982-85. The year 1931 saw the appearance of the *Analytischer Index* by Bang & Gabain, which unites the (corrected) lexical material of TT I-V and of two other texts edited by the authors. Caferoğlu 1934 is the first dictionary to unite the material of all the Uygur sources (including runiform mss.); its second edition (1968) includes Uygur material published till 1964. The fourth volume of H.N. Orkun's *Eski Türk*

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[42] Order of listing again by approximate volume of activity. I don't see much point in giving a full list of editors; see the index of the UW for their names and publications. The most prolific editor is probably P. Zieme, who is in charge of this task at the Berlin-Brandenburg Academy of Sciences.

[43] Religious Uygur texts, which are the majority, are normally translations, reformulations, expansions etc. of texts in other languages; Chinese, Indic, Iranian or Tokharian if the text is Buddhistic, Iranian if it is Manichaean, Iranian or Syriac if it is Christian.

Yazıtları and the first edition of Gabain's *Alttürkische Grammatik* both appeared in 1941. The former covers all runiform lexical material (including proper names and uninterpreted strings of signs), while the latter's glossary is meant to be a listing of all understood lexemes both in Uygur and inscriptional Old Turkic.

The first dictionary attempting to bring together the lexicon of the whole of Old Turkic as defined in the present work (i.e. also including Qarakhanid Turkic) was Nadeljaev et al. 1969 (the DTS). Clauson 1972 (the EDPT) has the same scope; both books only cover publications which appeared till the early 1960s, in spite of their publication dates. The EDPT is more sophisticated (e.g. in dealing with the QB) and more internally consistent than the DTS and is also useful in quoting Middle and Modern Turkic evidence for the entries as well as related Mongolian forms, including reference to the TMEN etc.; it is, on the other hand, weaker on phraseology, disregards (unlike the DTS) most borrowings into Old Turkic and is, furthermore, sometimes prone to unwarranted 'emendations' to the text. These two works supersede Caferoğlu's and Orkun's lexicons. Arat's *İndeks* to the QB (1979), in fact mostly the work of students after his death, contains lexical material from this text which is only partly included in the EDPT and the DTS, but it must be used together with Tezcan 1981. Six fascicles have until now appeared of Röhrborn 1977-1998 (the UW), the most recent Old Turkic dictionary. It has, to date, only covered one letter and a half, but is highly dependable, exhaustive as far as Uygur is concerned[44] and valuable also because the numerous passages quoted for context are reinterpretations reflecting present understanding. The OTWF, finally, can also serve for lexical documentation, mostly of derived lexemes. The Old Turkic lexicon is, then, still incompletely accessible in dictionary form, although the situation is vastly better in this domain than (hitherto) with the grammar.

1.33. Grammar

When Radlov and Thomsen worked on the runiform inscriptions which they published in 1895 and 1896 respectively, understanding their grammar appears not to have been a very difficult task for them: The difference between Old Turkic and modern Turkic languages is not

[44] It covers only Uygur mss. excluding the runiform ones among them, but includes the few inscriptions in Uygur script. Since our knowledge of Old Turkic advances continuously, it is natural for details in the UW to need revision already while getting published; this is often done in subsequent fascicles.

greater than that which we find between the Turkic languages for which there already existed good descriptions at the time: the work of Kazem-Bek, Castrén, Radlov or Böhtlingk, not to speak of the many grammars of Ottoman which were readily available. Radlov published his *Grammatische Skizze der alttürkischen Inschriften* already in 1897. The first western scholars dealing with particular aspects of Old Turkic were concerned with the sound system; cf. Foy 1900 and V. Grønbech 1902 on the vowels. The earliest linguistic arguments on Old Turkic were those between Thomsen and Radlov and concerned the consonants: Radlov thought these should be read as in today's South Siberian languages. This was denied by Thomsen (1901; text of a lecture held in 1897), whose opinion found wide acceptance; Thomsen's argument was based on the QB, a Qarakhanid source. When Uygur mss. were discovered around the turn of the 20th century, they were immediately seen to have been written in the 'same language' as the runiform inscriptions, though in a different dialect (or different dialects). Thomsen, Müller, Le Coq, Bang and others occasionally dealt with points of Old Turkic phonology and morphology in notes to text editions, when some suffix needed an explanation: It was only natural for scholars to put their linguistic abilities under the service of text interpretation and philology and to concentrate their endeavours on making a corpus available to the public before proceeding to grammatical syntheses. The first publications devoted to the language of the Old Turkic sources in general are Foy 1904 (on the fragments in Manichaean writing) and Radlov 1909-1912. In the numerous papers which Bang published between 1896 and 1934 on various text passages or on comparative Turkic grammar, he sometimes expresses ideas concerning Old Turkic morphology (e.g. on the collective nominals in *+AgU* and on the onomatopoeic verbs in Bang 1919); however, these get lost among his endeavours to prove dubious hypotheses concerning proto-language. The only other monograph studies which Old Turkic scholars of the first generation devoted to language were Thomsen 1913-18 and 1916 on inscriptional matters, Le Coq's 'Kurze Einführung in die uigurische Schriftkunde' (1919; to this day the only Uygur paleography) and two papers by Brockelmann (1919 and 1921) on linguistic aspects of the DLT.

Beside A.v. Gabain, whose *Alttürkische Grammatik* dates from 1941, Bang had several Tatar students who presented general Turkic dissertations, later emigrated to Turkey and founded philological

Turcology in that country:[45] G.R. Rachmati (also Rachmatullin; in Turkey R.R. Arat), S. Schakir, (later S. Ishaki, in Turkey S. Çağatay) and the younger A.Temir. Rachmati's dissertation (on auxiliary verbs and converbs in Altay Turkic, published in 1928) was fully linguistic, but his significant contribution to Old Turkic studies remains within the domain of philology; an important late (1963) paper documents and describes orientational terminology. Schakir's dissertation (1933) on word formation also covers Old Turkic, and three papers of hers (1940-41 and 1943 respectively) deal with Uygur. Gabain continued to publish on Old Turkic grammar (1940, 1940a, 1950, 1950a, 1957, 1964, 1970 on selected topics and the general description in PhTF I in 1959), but her interest gradually shifted away from the texts and their language; her editing activity also ended in 1958. Temir published papers on Uygur particles (1949, 1956). K. Grønbech (the son of V. Grønbech and a student of V. Thomsen) and A. Salonen were the first to deal with grammatical categories and some aspects of the syntax of Old Turkic in a general linguistic context (1936 and 1937 respectively).

Németh 1939, Mansuroğlu 1957 and K. Thomsen 1957 (K. Grønbech's student) all deal with the origin and nature of Turkic /e/ as distinct both from /ä/ and /i/ (but not necessarily from /ä:/); cf. also Doerfer 1994. This topic is highly relevant even now, as none of the alphabets used for writing Old Turkic has a special character for this phoneme; its existence is therefore sometimes still contested.

Gabain 1957 deals with another matter which brought about some discussion: the so-called 'connective vowels', thought by many to have been reduced vowels introduced to 'help pronunciation'; cf. Erdal 1979a, Doerfer 1981-82 and 1993a and Erdal 1996. The traditional view (presented e.g. in Gabain 1941/1950/1974) is that they followed fourfold high harmony (*i* / *ï* / *ü* / *u*), but Doerfer (and, following him, Johanson – still in Johanson 2001) have, in a number of publications, argued that these are reduced low vowels (*a*/*ä*). Doerfer 1993a would like to see these introduced into the transcription of runiform sources.

Kowalski 1949 explores an interesting aspect of Old Turkic grammar (as of that of some modern Siberian languages), touching both upon verb formation and syntax: the causative of transitive verbs, whose meaning can get close to that of a passive. Röhrborn 1972, Nigmatov 1973, Johanson 1974, Kormušin 1976 and the OTWF have contributed to the clarification of this topic.

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[45] Before these, Turkish Turcology had been mainly limited to Ottoman studies. The founder of the study of the history of the Turkic peoples in Turkey is Z.V. Togan, also a Tatar.

In 1953 there appeared E.R. Tenišev's 'Avtoreferat' of his thesis on Uygur grammar based on the (Radlov–Malov edition of the translation of the) Suvarnaprabhāsa. As far as I have been able to discover, this is the first paper since the work of Radlov dealing with the Old Turkic language to appear in the Russian empire and the Soviet Union. Nor were any Uygur mss. edited there after a publication by S.E. Malov (the student of W. Radlov) in 1932 (as distinct from editions of inscriptions, which did go on). The reason for this gap may have been the fact that Soviet scholars were already busy enough describing the modern Turkic languages spoken in their realm, that such activity seemed more useful and that western scholarship was practically inaccessible to Soviet scholars. Moreover Tenišev, one of the most fruitful Turcologists working on modern languages, wrote only one more paper on Old Turkic (in 1971, proposing an explanation for the replacement of *š* by S in the runiform inscriptions). Research in this domain was taken up by other Soviet scholars in the late fifties; we find papers by V.M. Nasilov (1958, on nominals), A.S. Amanžolov (1959 and 1963 on the government of derived and analytical verb forms), D.M. Nasilov (1960 on periphrastic modal constructions and 1966 on the form in *-yOk*), M.Š. Širalijev (1960 on the etymology of the gerund suffix *-XbAn*), V.G. Kondrat'ev (1961 on the function of the form in *-dOk* in runiform sources) and Šukurov (1965 on the form in *-gAlIr*). Axmetov 1969, finally, deals with the whole verbal system of the runiform inscriptions. All this work, we find, is related to morphology and grammatical categories. Then we have Ajdarov 1969 on auxiliary words in the Orkhon inscriptions. Borovkova 1966 broached a phonological topic with her paper on the labial consonants in Qarakhanid Turkic.

Scientific discussions taking place in the West were, in those years, mainly concerned with vowels. The discussions around /e/ and around the 'connective vowels' hypothesis which started rather early have already been mentioned. One further vowel problem causing some stir was the question of whether Old Turkic had long vowels; several modern languages have such vowels in inherited Turkic stems and we know that Proto-Turkic already had them, but evidence for Old Turkic is uncertain. Cf. on this question Tuna 1960, Tekin 1967 and Tekin 1975 (reedition 1995a); the problem is discussed also in some general treatises, e.g. in Zieme 1969. Another question concerns the nature of vowels in non-first syllables: Are there the same number of phonemes as in first syllables or are there a smaller number of 'archphonemes'? Does *o*/*ö* appear in non-first syllables outside Brāhmī texts? Are *o* and *ö* in non-first syllables allophones of other (high or low) vowels

appearing only after *o* or *ö* or are they phonemes? Cf. for this topic Clauson 1962, K. Thomsen 1963, Clauson 1966 and Erdal 1996. Clauson 1962 was of course also concerned with a number of other aspects of the language, such as word structure, word formation etc.; in a sense this is preparatory work for the EDPT. Clauson 1966, on the other hand, again limits itself to phonological matters. Pritsak 1961 can be be considered to be obsolete though still quoted in Johanson 1979. Meyer 1965 discovered the rules which apply for the explicit spelling of vowels in the Orkhon inscriptions, and partly also in other runiform texts; more attention to this paper would have prevented many a misled interpretation of those sources.

PhTF I, a handbook bringing together descriptions of most Turkic languages, appeared in 1959. Gabain's account of Old Turkic presented there is basically a summary of the grammar in Gabain 1941; Mansuroğlu wrote the chapter on Qarakhanid. Pritsak 1963, another short account of the whole corpus, is quite undependable. To this day, Gabain 1941 has remained the standard grammar of the language;[46] it reappeared, with a few additions and corrections, in 1950 and again in 1974. In Russia, meanwhile, short general descriptions of the corpuses were presented by A.M. Ščerbak (1961, dealing with Old and Middle Turkic as if these were a single language) and V.M. Nasilov (1961 on the runiform inscriptions and 1963 on Uygur). Then came Ajdarov 1966 on the language of the Köl Tegin inscription and Kondrat'ev 1970 on the whole Old Turkic corpus. Tekin 1968 and Ajdarov 1971 both describe the language of the Orkhon inscriptions, while Kononov 1980 describes the runiform sources as a whole. Tekin's work covers all grammatical domains of this small corpus in structuralist exhaustiveness and also presents a full concordance of the lexicon including proper names as well as new editions and translations of the texts. Zieme 1969, which is highly authoritative but remains unpublished, deals with the graphemics, the phonology and morphology (but not the syntax) of the whole corpus of Manichæan sources (part of which he published later). Concerning Qarakhanid there is a description of syntax by Abduraxmanov (1967), of the verbal system by Ercilasun (1984); Hacıeminoğlu 1996 is a full (but rather superficial) account of Qarakhanid grammar. Erdal 1998a is the most recent and concise description of the language of the whole Old Turkic corpus while T.Tekin 2003 deals with the whole corpus of inscriptional and

[46] In spite of its name, this work deals not only with grammar and related matters but also contains an anthology, a dictionary and a large bibliography also covering many non-linguistic aspects of the early Turks' world.

manuscript runiform sources (and not only with the Orkhon inscriptions, as its title would imply).

One question which has intrigued scientists and become the object of numerous publications is the origin of the runiform script. Hypotheses have stated either that it is of Semitic origin, that it comes from tribal marks (used on gravestones, for branding animals, to mark domain borders etc.) or that it comes from ideograms (e.g. the sign for ^{w}q looking like an arrow, *ok* in Turkic). This question and the literature on it (from before decipherment till this day, e.g. by Emre, Clauson, Tryjarski, Pritsak, Róna-Tas, Ščerbak and many others) will not be followed up in the present work. What we are interested in is the system of writing and its relationship to the sound system; two publications on this are Kormušin 1975 and Hovdhaugen 1979. Vasil'ev 1983 is a book on runiform palæography. Much about the runiform, Brāhmī and Tibetan writing systems can be found in Róna-Tas 1991; the chapters on the use made of the Tibetan and Khotanese Brāhmī scripts is especially important. Handbooks such as Gabain 1941 and Caferoğlu 1969 also have palæographical sections. The early palæography of Le Coq for the Uygur script has already been mentioned; cf. also Laut 1992. Moriyasu has done serious work on the diachronical palæography of the Uygur script, stating that what he calls the square style is found only in the pre-classical stage; the other three styles he posits are semi-square, semi-cursive and cursive, which is always late.

For the phonological domain cf. Doerfer 1971. We already mentioned some of the work on the vowels of Old Turkic. Röhrborn 1996 is about synharmonism in foreign words. The introductions to BuddhKat (a text in Tibetan writing) and Maue 1996 contain valuable observations to the vowel system as emerging from these sources.

Sims-Williams 1981 should be basic reading for anyone dealing with the Old Turkic consonants. Among the consonants the labials were discussed by Borovkova 1966 and Hitch 1989, the alveolars by Maue 1983, the gutturals by Maue 1984 and Röhrborn 1988. Maue's papers and Johanson 1979 reflect scholarly activity around the phonetic value of the Old Turkic consonants based mainly on the Brāhmī sources. The latter monograph propounds bold hypotheses also concerning a number of aspects of Orkhon Turkic (as stated in several reviews, among them Gabain 1982). In the runiform inscriptions, suffixes which have [š] in most modern languages are spelled with S, for which Tenišev (1971) tried to find an explanation. There is also a Manichæan ms. showing the same phenomenon, but Zieme (1969) thought that that was a mere orthographical matter. It has been noticed for some time that the

opposition between /ŋ/ and /g/ is weak, the latter often replacing the former in modern languages, in Orkhon Turkic (cf. e.g. Tekin 1968) and in the DLT (cf. the introduction to Dankoff & Kelly 1982-85). Hamilton 1977 pointed out that the replacement exists also in some Uygur texts connected with the city of Khotan. Doerfer 1995 deals with the alternation *ï-* ~ *yï-* in Old Turkic: The author had shown in his work on Khaladj that the phoneme /h/, which appears at the beginning of words in that language, must have its source in Proto-Turkic, and that it correlates with an unstable onset /y/ in Old Turkic. Here he proposes that /h/ be read in these words also in Old Turkic. The fact that the opposition between Proto-Turkic /r/ and /z/ is neutralized both in the Chuvash-Bolgar branch of Turkic and in the Mongol words corresponding to Turkic lexical or gramatical units with /z/ has occupied Altaistic research for some time. An apparently irregular alternation r ~ z exists also within Old Turkic, as described, among others, by T.Tekin (various publications), Xelimskij 1986 and the OTWF.

A number of scholars, a.o. Röhrborn, Laut, Maue, Shōgaito and Moriyasu, have in the last two decades dealt with the phonic shape of Indic terms borrowed into Old Turkic; this reflects whether they came over Chinese, Tokharian or Sogdian, showing the immediate source of translations of Buddhist texts, the flow of cultural contacts and the degree of Sanskrit erudition of the translators and scribes.

W. Bang's often adventurous contributions to word formation did not quite distinguish between etymology and this domain of grammar; indices to Bang's voluminous work would be very welcome. Gabain 1941 and Räsänen 1957 generally do make this distinction but do not distinguish at all between deverbal nouns on the one hand, and participles on the other. Kobešavidze 1972 and the introductions to Schulz 1978 and OTWF (as already Erdal 1976) try to clarify this question. A systematic listing of formatives can be found in Clauson 1962. Schakir 1933 and Nigmatov 1971 both deal with denominal formation. OTWF might be said to supersede much of what preceded it in connection with word formation simply because it was based on a much wider material basis. One particular point of that work is corrected in Röhrborn 1995, which deals with the nominal use of 'adjectives'. Doerfer 1982 gives examples for lexical units used as both nominals and verbs; that this is possible in Old Turkic grammar is denied in Erdal 1976/1991.

There are several relatively recent papers on Old Turkic case forms. Gabain 1970 constructs a distinction between primary case forms as the accusative, the instrumental and the genitive, and secondary case suffixes, whose juncture seems to be looser in Old Turkic. The genitive and the accusative forms are dealt with by Doerfer (1983 and 1990), who thinks that the form of nominals demanded by postpositions is not the accusative but an 'oblique' stem. T.Tekin 1991 and 1996a are papers on Old Turkic case forms motivated by the Altaic hypothesis: The first (correctly) states that the Orkhon Turkic comitative is to be linked to a Mongolic case form and not to the suffix *+lXg*; the second tries (unacceptably, I think) to posit an Old Turkic dative-locative suffix *+A* parallel to the Mongolic suffix of the same shape (an idea adopted also by L. Bazin). Sertkaya 1992 describes the recursivity of case suffixes with pronouns, Erdal & Schönig 1990 the vowel alternation in the case forms of demonstrative pronouns. T.Tekin 1985 and Zieme 1992 deal with postpositions; the former paper is about *üzä*, in which the author finds the dative-locative suffix *+A* to which he returns (again) in 1996a. Barutçu 1992 deals with the elements *kaltï* and *nälök*, both of pronominal origin and signifying 'how', which have very different functions. Moerlose 1986 is about the manifold functions of the element *ulatï*, which is hard to assign to a part of speech; it is a conjunction only in some of its uses. Erdal 1991a deals with the Orkhon Turkic pragmatic particle *gU*, found also in some modern Turkic languages and in Mongolic.

Ehlers 1983 discovered how the last decade of every hundred numerals is expressed in the counting system of early Old Turkic; Clark 1996 has a quite plausible theory on the source of that system.

The morphology of the verbal system is covered well by Zieme 1969 for Manichæn sources, T.Tekin 1968 for Orkhon Turkic, Ercilasun 1984 for the QB, by Brockelmann 1919 and Dankoff & Kelly 1982-85 for the DLT and Gabain 1974 for the rest. Erdal 1979b describes the distribution of the vowels of the converb and aorist suffixes in simple and derived verbs of inscriptional Turkic and Uygur, Erdal 1986 of Qarakhanid Turkic; T.Tekin 1995 shows how some of these are explained through Mongolian. Eraslan 1980 describes the verbal nominals of Old Turkic, while T.Tekin 1997 focuses on *-dOk*. Röhrborn 1993 tries to delimit the border between the nominal and the verbal domain; Röhrborn 1998a proposes *är-gäy* as etymology for the particle *ärki*. Šervašidze 1978 deals with analytical verb forms in the runiform inscriptions, Tekin 1996 with two such constructions; cf. also the

introduction to Schönig 1996. Šervašidze 1979, Telicin 1987 and Johanson 1988 are about Old Turkic converbs.

Syntax is a relative newcomer to Old Turkic studies; what we find in Gabain 1941 is morphocentric and rather erratic. Schinkewitsch 1926, although dealing primarily with the language of (early Middle Turkic) Rabghūzī, refers to syntactic aspects of Qarakhanid, Uygur and Orkhon Turkic sources as well and is also important for the way he views Turkic syntactic problems. Abduraxmanov 1967 and Nigmatov 1975a are general descriptions of Qarakhanid syntax; there is nothing similar for Old Turkic proper.

The first papers I could discover on specific syntactic topics are Ş. Tekin 1965 on oblique clauses and Poppe 1966 on nominal phrases and nominal compounds; this latter is the topic also of Adams 1981 and Röhrborn 1987. Both Adams and Kayra 1994, who deals with adjectives and adjective phrases, limit their paper to the Orkhon inscriptions; by far the greatest volume of linguistic and philological research has been carried out on this group of texts, although it constitutes only a minute fraction of Old Turkic sources. Uygur uses the suffix *+lXg* to form nominal phrases with metaphorical content. These structures were first described by Erdal 1976; in 1981 this description was presented at a symposium organised by C. Röhrborn, who published only a greatly abbreviated version of the paper in 1982. Röhrborn himself dealt with the same topic in the 1980 volume of *MT*, which came out in 1983 (Röhrborn 1983b). The 1976/1981 text finally appeared in print as part of OTWF. Röhrborn 1983a is about the syntactic behaviour of Indic loans. Nigmatov 1975 describes the semantic and syntactic functions of Qarakhanid case forms.

Old Turkic verbal government is the topic of Amanžolov 1969, while Kuznecov 1971 describes clauses formed with *-dOk* in the inscriptions. Johanson on Turkic "hypotaxis" (1975) and on Turkic converb clauses (1995) is concerned also with Old Turkic. Schulz 1978 is a doctoral thesis on Old Turkic adjunct clauses. Tuguševa 1986 is an overview of nominal sentences with the pronoun *ol* as topic or comment. Subaşı Uzun 1995 wrote a text grammar of the Orkhon inscriptions. Erdal 1998b, finally, is about diachronic syntax: It shows how the early Old Turkic so-called 'construction of two subjects' brought about the adnominal nominative construction.

The use of much of the work mentioned is relatively limited, as it does not take the very substantial text editions of the last thirty years into consideration; this is especially true of the Soviet Union, where

western publications got known with delays of up to a decade. In many domains of Old Turkic grammar, Gabain 1974 is still the last word. It can be considered to approximate adequacy only in morphology. Much has to be added even in that domain, as some phenomena happen to have first come up in texts which appeared more recently. Many questions about the sound system are still open and partly have to be given tentative answers; for a number of areas (especially in syntax) the description offered below is a first attempt.

1.34. Dialectology and language change

Since the beginnings of research into Old Turkic it was clear that there are a lot of similarities and also some dissimilarities between the language of the different corpuses mentioned in section 1.2. Gradually it also became clear that there were some differences within these corpuses, both among classes of Uygur texts and among runiform inscriptions, whether due to dialect, historical development, different sources or style. Bang & Gabain wrote in 1929 in a note to TT I 151-152 that there are dialects within Uygur: Referring to what they read as the diminutives *ašnukïna* and *amtïkïna* in that passage, they state that earlier Old Turkic *ñ* became *n* in Manichæan texts which, as they thought, were mostly written by Oguz Turks, but *y* in most other, mainly Buddhist texts.[47] In the n. to l. 1826 of her 'Briefe der uigurischen Hüentsang-Biographie', which appeared in 1938 (pp. 367-369 in SEddTF), Gabain set out her views on this topic in greater detail and with a number of characteristics: She now distinguished three dialects, the *n* dialect, the *y* dialect (for the distinction of which she adduced further criteria) and the dialect of the Brāhmī mss., adding a short list of sources said to belong to the *n* dialect. She rightfully stressed that the dialects mix these characteristics (a point also made by Hazai & Zieme 1970: 132, Gabain 1974: 3-8, Schulz 1978: XIII-XVII and Laut 1986: 61), but thought that they predominate one way or the other in all texts, making classification into the two groups possible.

Recent discussion on the question of Uygur dialects was initiated by Zieme 1969: 173-182 (published with slight alterations as the second

[47] The question of the development of early Old Turkic /ñ/ is taken up in section 2.33. There is a contradiction in Bang & Gabain's statement on TT I as this text is not, in fact, Manichæan. In the UW, these instances are reinterpreted as instrumental case forms of *+kIyA*, i.e. *ašnuk(ï)yan* and *amtïkïyan* respectively, while Röhrborn 1981-82: 298 reads *ašnukïča* and *amtïkïča*. That some Manichæan texts show similarities with the language of the runiform inscriptions had already been noticed by W. Radloff in 1908.

part of Hazai & Zieme 1970), who gives detailed information on all (published and at that time as yet unpublished) Manichæan sources available to him concerning a number of points and lists some linguistic criteria likely to distinguish between dialects as found in mss. clusters. Batmanov 1971 tries to find correlations between Old Turkic dialects and modern Turkic languages; in this connection it may be mentioned that Doerfer 1975-76 and 1975-76a state the language of the Orkhon inscriptions to be the earliest stage of Oguz Turkic. In the EDPT Clauson (1972; xiii ff.) distinguished between "Türkü", which he conceived of as including Orkhon Turkic as well as runiform mss. and Manichæan texts retaining /ñ/ such as the Xw, and two distinct "but closely related" Uygur dialects, "Uygur" and "Uygur-A". The EDPT's 'Uygur' covers not only what is generally called by this name but also the runiform inscriptions inscribed in Mongolia during the Uygur Steppe Empire; Uygur-A was defined by the lowering of high vowels referred to in section 1.2. Kondrat'ev 1973, Tuguševa 1974, Tenišev 1976 and Blagova 1977 discuss the differences between Orkhon Turkic and Uygur and try to answer the question whether these are dialects or different languages.

Erdal 1976: 10-48 (published with minor changes as Erdal 1979) dealt with a set of linguistic characteristics of Old Turkic diachrony as distinct from external characteristics such as palæography, content, explicit dating or the appearance of the document (e.g. whether it is a ms. or a block-print, the latter appearing only under Mongol domination in the 13th century). The paper lists a number of linguistic criteria which can serve for placing texts into older or younger strata of the language, while Zieme 1981 and Bazin 1991 are concerned with extra-linguistic dating. Erdal 1979 thought that the appearance of the runiform letter ñ or the spelling NY in other writing systems is older than the change of /ñ/ to /n/ or /y/ though Zieme 1969: 173-182 had already stated that Manichæan texts could have a fluctuation between NY and N. Röhrborn 1983 thought that fluctuations should be taken to be merely graphic. He suggested they should not be seen as a critical criterion for classifying texts, the Maitrisimit consistently having ñ > y but, on the other hand, most of the other criteria for including it into one group with the texts which either write NY or N for /ñ/. In a text showing both NY spellings and N or Y variants instead of that, the N or Y instances should, he proposes, like NY also be read as [ñ]. The same premiss could also lead one to the opposite conclusions: That the scribe knew the words were supposed to be pronounced with [ñ] but let his own pronunciation, which was [y], interfere with spelling which reflected conservative

practice. Other scholars have also thought about this free alternation: Hamilton (in a note to KP) wondered whether there was dialect mixing; below we quote the opinions of Arat and Laut on the question.

Tenišev 1979 developed the theory, subsequently found reiterated by a number of Soviet scholars like also Kondrat'ev 1981, that Old Turkic was a written language which was wholly distinct from the languages and dialects actually spoken by the scribes: These latter could, he thought, have been closer to the earlier stages of modern languages. Erdal 1985 shows that alternants existing side by side in the QB and chosen for the sake of poetical form are, in fact, real regressive and progressive variants which can be taken to have both existed one beside the other in spoken language.

Important contributions on the history of the Buddhist Uygur corpus came from Shōgaito 1982, who showed that a small early group of Buddhist texts which were linguistically close to Manichæan sources had Buddhist terminology in Sogdian rather than in Tokharian garb, i.e. that there was a correlation between the path of borrowing and the linguistic shape of the Old Turkic texts themselves, and from Röhrborn 1983. Shōgaito thought the spelling of high vowels as low ones in pre-classical texts together with the frequent omission of these vowels meant that they were pronounced short. This hypothesis (which seems plausible) is quite distinct from the 'helping vowels' hypothesis, as it does not refer only to suffix vowels, and not only to fourfold harmony vowels (which are not, after all, the only ones affected). Maue & Röhrborn 1984-85: Teil II 77-79 stated that differences conceived of as being dialectal in fact represent different stages of development. On a distinction between pre-classical and classical Buddhist Uygur texts based on orthography, types of loan words and some less linguistic criteria see especially Laut 1985 and 1986: 59-88. These interpret some distinctive characteristics of Zieme 1969 and Erdal 1979 as well as one or two others as indications of language change and not of dialects. Laut embedded his ideas in history: According to him, the Sogdians first introduced the Turks to Buddhism in the 6th century. However, an important element in the argument of Laut 1986: 6 has subsequently proved to be groundless: The word understood as *saṃgha* 'Buddhist community' in the Sogdian Bugut inscription, dated to around 580 A.D., has now been shown to be the Iranian word for 'stone' (i.e. stele), *sang* in Persian.[48] Those who, in the second half of the 8th century, not only brought Manichæism to the Uygur Turks when they still had their

[48] The content of the inscription points towards a quite different religious orientation, an ancestor cult.

steppe empire in Mongolia, but also got them into adopting this as their state religion and had the first texts translated were also Sogdians. More recently, Moriyasu has come up with a tripartite chronological classification of mss. based on Uygur paleography. As proven by Moriyasu 1990, the Uygurs were actually first converted to Buddhism through the efforts of Chinese and Tokharians when, vanquished by the Kïrgïz in 840, great masses of them moved into the Tarim basin and got into intensive contact with the Tokharians while others got even closer to core China; all major early Uygur Buddhist texts are translations from Tokharian. Another argument which has been raised in favor of the precedence of Buddhism over Manichæism among the Uygurs is the Manichæan use of *burxan* 'Buddha' to refer to prophets in general. Moriyasu shows that Chinese *fo* did not necessarily refer to Buddha either; Chinese practice in this matter would have been copied by the Uygurs. According to Moriyasu the Uygurs were Shamanists before adopting Manichæism. In view of the scantness of information on the actual religion of the early Turkic tribes the term 'Shamanism' may not necessarily be justified; Moriyasu no doubt simply means that the Uygurs were practising their original religion before they (or at any rate their elite, one should perhaps say) turned to Manichæism.

Doerfer 1993 combined 30 different criteria for the linguistic dating of Old Turkic sources but simplifies and distorts matters a little; cf. the reviews of Tekin 1994 and Zieme 1994. New research taking numerous texts published during the last decade into consideration as well as the theories of the 1980s (which Doerfer did only to a limited extent) and 1990s would be highly welcome.

CHAPTER TWO

GRAPHEMICS, SPELLING, PHONOLOGY AND MORPHOPHONOLOGY

The graphic and phonic component of Old Turkic is here presented in the tradition of European structuralism, which uses abstract phonemes as phonological units. A phoneme consist of a set of equally abstract allophones, whose alternation is conditioned by the phonic context. Such context can also let phonemes alternate among themselves, neutralising oppositions between them. A family of phonemes alternating under such neutralisation is called an archphoneme. We assume that the graphic data of Old Turkic intend the representation of pronunciation; there is certainly no necessary one-to-one correspondence between graphemes (i.e. 'letters') or grapheme sequences and phonemes or allophones, but spelling choices made by the writer are not a priori taken to be arbitrary: Solid internal evidence has preference over historical, comparative or indirect information.

2.1. *Graphemics*

Old Turkic was written in a great number of writing systems.[49] Most sources use alphabets of ultimate Semitic origin, borrowed through Sogdian: The Manichæan and Syriac scripts were used by Manichæans and Christians respectively; by far the most common was the Uygur script, used by adherents of all religions among the Turks of Eastern Turkestan. It is a variant of the Sogdian script, which, itself, was also put to limited use for Old Turkic. The Yarkand documents, which are Qarakhanid, are also in Uygur writing (though with Arabic characters as diacritics); Kāšġarī lists the Uygur alphabet, calling it the alphabet of the Turks, but both the DLT and QB are written in the Arabic script,[50] the vehicle of Islam. Indic scripts were used much less than the scripts coming from the West, the Khotanese variety of Brāhmī and the Tibetan script even less than Brāhmī script as used by the Tokharians.[51]

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[49] Tables showing the actual letters can be found in all the other handbooks dealing with Old Turkic.

[50] One of the three QB mss. is in Uygur writing; this is the latest among the mss., however, and there now seems to be no doubt that it is a secondary transcription.

[51] There also are a few Uygur seal imprints and one economical text in 'Phags-pa, a

The sources which use Indic scripts are of great linguistic value, however, as these scripts are highly explicit in their rendering of vowels.

The original Turkic script is the one here named ‘runiform’; it was at first named ‘runic’ because it was thought to be akin to the Germanic runes before it was deciphered. Some of its characters look similar to ones found in early Semitic alphabets; this makes it likely that some such script (one used, for instance, in the Caucasus, where Turkic presence appears to have been quite early as well) was known to its creator(s). The inconsistencies and complications of the runiform script in the voiceless sibilant domain also strongly remind us of the Semitic languages. On the other hand, the fact that the vowels [a] or [ä] can be implicitly understood to be present throughout the word (though not at its end) when nothing is written explicitly are a feature known from Indic systems. However, the appearance of all other vowels in non-first syllables is also left implicit, if they are preceded by a vowel of the same class of backness / frontness and roundedness (though not necessarily equal in height).[52] The runiform system is certainly not one of *akṣaras*.[53] It is not a syllabic system either, as some have maintained,[54] although some complex characters have been transliterated as ^{w}k or as ^{ï}k: These signs (to limit oneself here to these examples) cannot be interpreted only as signaling ‘uvular *k* preceded by *o* or *u*’ or ‘uvular *k* preceded by *ï*’ respectively, since the vowel whose presence they imply can also follow them. Moreover, they can also be separated from this vowel by /l/ or /r/; thus e.g. *yïl+ka* is spelled as y^{1}I1^{ï}k^{1}A in Tariat E9, S1, 2, 3 and 5 and W2. Similarly, the well-known *kör+lüg* should in IrqB 18 and 64 not be read as *‘körüklüg’* just because it is spelled with the ^{ü}k ligature; nor should *Türk*, attested since

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writing system akin to the Tibetan one, invented for writing Mongolian; cf. Zieme 1998.

[52] Doerfer in several places (also e.g. 1993: 119) states that whatever is implicit in runiform sources is either a / ä or ă / ĕ. This is in accordance with his view that /X/ was originally realised not as /ï i u ü o ö/ but as / ă ĕ/. In fact, however, it is not only /A/ or /X/ that remain implicit, but any vowel preceded by another vowel of its own class: *yükündür-* in KT E2 and BQ E3 or *sökür-* in KT E18 and BQ E16 are both spelled with only the first of their vowels made explicit, e.g., although the causative suffixes have the shape *-dUr-* and *-Ur-* respectively. See more on this below.

[53] An *akṣara* is a unit of writing of the numerous Indic alphabets. It consists of any consonant cluster (even one whose consonants belong to different syllables, e.g. *tp, cch* or *ntr*) + any subsequent vowel (including nasalised vowels and syllabic sonants).

[54] E.g. Johanson 2001: 1724b. The table in T.Tekin 2003: 23 gives three characters the readings *baš*, *däm* and *kïš* respectively; the first of these has, e.g., been read in Taryat N3 (twice) and 4. All these are rather arbitrary proposals and seem unlikely. See Erdal 2002: 64 footn. 38 for ‘*däm*’, which is probably merely a variant of d^{2}.

early times in very disparate places, be read as *'türük'* only because of such spelling.[55] Moreover, we find the signs indicating both a consonant and a vowel to be used *beside* explicit vowel letters; e.g. $s^1w^wkws^1mIs^2$ = *sokušmïš*, $t^1wt^1w^wpn^1$ = *tutupan*, $t^{2''}w^{\ddot{w}}kl^2$ = *tükäl* in IrqB 2, 16 and 27 respectively. Tekin 2003: 33-36 lists Orkhon Turkic examples where ^wk, $^{\ddot{w}}k$ and $^{\ddot{\imath}}k$ are used beside explicit w, ẅ and y respectively. Such spellings do not indicate vowel length, as some have thought, as they do not correspond to lengths known from Yakut, Turkmen etc.. All this means that the vowel + consonant signs serve only to show the quality of consonants when pronounced in the vicinity of particular vowel features; they *are* mere consonant letters and not syllabic in character. To sum up, this is an alphabetical system perhaps remotely betraying Semitic motivation. It appears that the runiform script was devised for writing Turkic or some other language showing a number of the typological traits characteristic of the Turkic group:

a) synharmonism[56] and the presence of the front rounded vowels *ö* and *ü*, both equally untypical of Semitic, Caucasian, East Asian and early Indo-European: The script distinguishes front and back harmony in rounded vowels and also in most consonants; there are, e.g., sets of very different-looking characters for front *b* and back *b*, front *y* and back *y*, and so forth;[57] we transliterate these as b^1 and b^2 respectively. Semitic writing systems distinguish only between velar and uvular /k/ (*'k'* and *'q'*) and /g/ (often noted *g* and *ġ* respectively), a distinction which has been used for expressing synharmonism in Turkic languages.

b) no expression of tones, as, e.g., in Chinese.

c) a preponderance of closed syllables as against open ones, unlike Chinese or Japanese: Alphabetical writing systems can be divided into 1) such that have an explicit expression of vowels in the same chain as

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[55] Dispute 3rd folio r2-3 has another instance of *körk* spelled with $^{\ddot{w}}k$ after the /r/, wrongly written as k^2 in P. Zieme's reedition of the fragment. The word in r1 of the same fragment cannot, however, be read as *'körüksüz'* and translated as "ugly": What the ms. has does not look to me like $k^{2\ddot{w}}r^{2\ddot{w}}k^2s^{2''}wz$, as Zieme, Sertkaya and Wilkens nr. 580 write, but $b^{2\ddot{w}}r^{2\ddot{w}}k^2s^{2''}wz$; the first character is a bit damaged but clearly seems to be b^2.

[56] A more correct term widely used in Russian Turcology for what is usually (and often in this work as well) called vowel harmony. Harmony does not affect only vowels but consonants as well (though writing systems used for the Turkic languages reflect this fact less than they might).

[57] *y* is a palatal consonant, which sometimes fronts vowels beside it. The fact that the system provides for a back [y] shows that it is necessarily not meant to serve phonetics only, but also the characterisation of syllables as functioning in supra-segmental (morpho-)phonological context.

the consonants, e.g. the Greek alphabet and the ones descended from it or the Germanic runes; 2) *akṣara* systems, in which signs for consonants (or even consonant clusters) are kernels around which vowel (or other) signs are obligatorily clustered, in Indian or Ethiopian alphabets; finally, 3), systems in which the writing of a consonant also implies the presence of a vowel beside it, though vowels can also, optionally, be expressed explicitly. Such implicit vowels *follow* the consonant in systems used for writing Semitic or Indic languages, the character for *t* also being used to note sound sequences such as *ta* or *ti*; the runiform system is alone in this third group in implying preceding vowels, such as *at* or *ut*, when merely writing *t* and not vowels following the consonant. This trait of the runiform system is incompatible also with the root principle in the lexicon, characteristic both of Semitic and early Indo-European. All coda vowels, on the other hand, are written out as separate characters (again unlike the Semitic and Indic systems).

d) A binary distinction of non-nasal consonants at each point of articulation, whether it be called voiced vs. voiceless, strident vs. mellow or stop vs. continuant etc.; most of early Indo-European has a threefold system, Sanskrit a fourfold one and Semitic as well as Caucasian languages have even more complex distinctions. Such characteristics might also be connected with other Altaic languages or with Uralic, but not a single inscription or ms. has as yet been found to bear a runiform text in any of those languages.[58]

e) Such signs as y^1, which looks like the half full moon (*ay*), ^{w}k, which looks like an arrow (*ok*) or b^2, which has the shape of a tent (*äb/äv* 'house, home') seem to have an ideogrammatic background in Turkic (and not, e.g., in Mongolic).

f) The fact that the runiform alphabet was put to popular use in a vast area (including quite remote Siberian regions) coinciding with the roaming grounds of the early Turks, and not outside them, would equally speak for an original Turkic creation; the Tangut and Qïtañ, e.g., also invented and used their own writing systems.

Although the runiform script is thus likely to have been devised by Turkic groups, the Türk empires which formed in Mongolia probably first used the Sogdian–Uygur alphabet, because they were introduced to sedentary civilisation by the Sogdians.[59] The use of the runiform script

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[58] A few runiform ms. texts are in Middle Iranian languages; they were apparently written by Manichæan Uygurs.

[59] See e.g. Laut 1986: 5-7. The first draft of the Orkhon inscriptions may also have been written in Sogdian–Uygur script: In KT N7 (though not in the parallel passage BQ

in the second Türk empire is no doubt to be seen as motivated by the return to the Turkic way of life as preached by Tuñokok in his inscription, which tried to neutralise the influence of foreign religions and cultures as much as possible. The original home (as distinct form the ultimate source) of this script may not have been in Mongolia but in Central South Siberia; there it was widely diffused and used by the population at large, as proven by grave inscriptions as well as some scribblings spread over a vast area.

The paleography of all of the scripts used for Old Turkic will not be dealt with in this work, although what has been published on this topic till now is quite inadequate. For the time being, Gabain 1974: 9-41 (which also contains remarks on phonetics) can be consulted for a general survey, Le Coq 1919 for Uygur writing, Róna-Tas 1991: 63-117 for the Brāhmī and Tibetan systems as applied to Old Turkic and Maue 1996: XV-XVIII specifically for Brāhmī. We will be referring to all of the scripts in transliteration, to all texts in transcription. On p.1 of HamTouHou convincing proof is given that, at least in early Uygur times, both runiform and Uygur mss. used to be written and read horizontally as in the West, not vertically as in Chinese.

Old Turkic punctuation cannot be taken at face value; runiform punctuation has been studied but is still poorly understood; hardly any attention has been given to punctuating principles in Uygur texts (though the shape of punctuation marks is often referred to as a clue for the scribe's affiliation). A future paleography will also have to document whether suffixes are linked to or separated from their stem in spelling (as done by a few text editors[60]); separation happens more in the nominal than in the verbal domain.

It is useful that the language we are investigating appears in so many different writing systems, as each one of them is inadequate in some ways or other; all of them leave some phonic qualities unexpressed or irregularly expressed even on the phonemic level. One therefore should not endeavour to base information about the sounds and the sound distinctions represented through a text by referring to that text alone. Rather, we have to turn to that writing system which is most adequate

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E31, which was put to writing some time later) we find the passage *bir uguš alpagu on ärig*, which must be an error for *bir uguš alpagut ärig* as 1) *bir uguš* is a quantifier which makes *on* 'ten' superfluous, 2) a numeral should not stand after a noun and 3) *alp* and *alp+agut* are attested but a collective *alp+agu* is not and would not suit the context. *on* and *t* look quite different in runiform script but could look identical in Sogdian–Uygur writing, and mistaking one for the other could have caused the error. The sentence is interpreted and translated in section 4.631.

[60] E.g. the editor of TT X on p.9 of her edition.

for each particular domain of phonology. We read the vowels of the runiform inscriptions as in Uygur, e.g., because Uygur has a much more elaborate rendering of vowels than the vast majority of runiform sources, and is the dialect aggregate closest to inscriptional Turkic; moreover, some runiform texts may not be earlier than the 'Uygur' corpus. In a few cases, using one script for transcribing a text written in some other script could be problematical; here is an example: Whether a certain vowel is to be read as [o] or as [u] can be determined only through instances in the Indic scripts, Brāhmī and Tibetan, beside, of course, modern and comparative evidence. It was originally thought by Gabain and a few others that the Brāhmī sources represent a dialect by themselves. If a stem were written with *o* in a Brāhmī source, were not attested in Tibetan writing and if modern evidence were absent or conflicting, could we be sure how to read it in other sources, e.g. ones written in Uygur writing?

The Uygur, Manichæan, Sogdian and Syriac scripts do not distinguish /ï/ and /e/ from /i/, /o/ from /u/ or /ö/ from /ü/: The shortcomings of the Semitic system were only partly compensated for by (generally) using, in the first syllable, two *alefs* for /a/ to distinguish it from a single one for /ä/,[61] and by creating the digraph WY for front rounded vowels. In some sources, /o/ appears to have been spelt with two Ws in certain single-syllable stems, apparently to distinguish it from /u/. The non-distinctions of the Semitic system, which distinguishes between high and low vowels in the un-rounded domain but not for rounded vowels,[62] are found also in the runiform script as used in Mongolia. The asymmetry in distinguishing frontness only in the rounded domain, height only in the unrounded one appears in both of these otherwise quite different systems. Some inscriptions of the Yenisey area are more explicit than the Semitic Old Turkic alphabets in having special characters for /e/ or /ä/; most runiform texts write /ä/ with the character

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[61] In mss. in cursive writing double and single *alef* are not always distinguishable. Onset /a/ is in a part of the lexemes spelled with a single *alef* if two consonants follow, e.g. in *alp* (with *alplan-* but not *alpagut*, *alpal-* or *alpïrkan-*), *amra-* (with *amran-, amrak, amraksïz, amrančïg, amraš-, amrat-*), *amrïk-, amrïl-, amru, amtï, arslan* (but not *arslanlïg*), *artok* (beside the variant with two *alefs*), *artuč* and *artut*. This does not happen if the second consonant belongs to a suffix, as in *ač-mak*, and hardly ever if the consonants become adjacent through syncopation, as with *adr-ïl-* or *adr-ok*. *alčak, aldïrtï, alk-, alka-* (with a single *alef* in a few early instances of the verb and of *alkatmiš, alkïnču* and *alkiš*), *alkïg*, *alku* and *almïr* are, however, spelled with two *alef*s.

[62] In Arabic writing, e.g., *a* is distinguished from *i* but *o* is not distinguished from *u*; in general, *alif* serves as *mater lectionis* for low unrounded, *yā'* for high unrounded vowels, but there is only one *mater lectionis* (*wāw*) for all rounded vowels.

used for /a/. I read the runiform vowels as in Uygur. The Brāhmī and Tibetan writing systems show the greatest distinction in vowels, though the sources in Tibetan script which we have should be used very cautiously: Their spelling is often strongly influenced by the fact that Tibetan itself was not spelled phonetically. Determining the pronunciation of what we find in those ms. has to take into account the expectations of a Tibetan reader alongside the phonetic values of the letters. We have no reason to believe that there was a special Brāhmī-dialect (as Gabain did at least at some stage and T.Tekin 2003 apparently still does), although the fluctuation in the pronunciation was clearly such that there were a number of possibilities (as in any language and as shown by variation within Brāhmī and Tibetan evidence itself). Authorities on Uygur now agree that Uygur Brāhmī was used for the same dialect as Uygur script (a dialect which must of course have varied over time and space): Two Brāhmī texts, TT VIII K[63] and O are found in Uygur script as well, and scribes often introduced Brāhmī glosses or *akṣaras* into mss. in the latter. Wherever a word is attested in Tibetan or Brāhmī script, that evidence is fully followed here as far as its pronunciation is concerned: Since, e.g., the word coming from Skt. *abhiṣeka* over Tokharian A and B *abhiṣek* is in TT VIII D17 spelled as *abišik*, this is what we adopt (as against *'abišek'* in the UW). The scribe did, after all, have the possibility of writing *e* in the last syllable.[64]

[ï] is spelled with *yōd* in all scripts of Semitic origin which were used for writing Old Turkic, except that we sometimes find it spelled with *alef* in a number of pre-classical texts (see section 1.2 above), e.g. in *yalanlar* (MaitH XX 1r19) which stands for *yalïnlar* 'flames' or, in a Manichæan text, *kap-ap* 'snatching' (DreiPrinz 49). This apparently happens in Sogdian and Uygur writing more often than in Manichæan writing; there is no collocational limitation for this spelling. Since *alef* in non-first syllables represents [a], a vowel unrounded and posterior like [ï], whereas [i] is unlike [ï] in being fronted, this could be a mainly graphic fluctuation, reflecting the intermediate nature of [ï]. In no text is /ï/ generally spelled with *alef*, the most common spelling of [ï] being *yōd* in all sources. Since, however, there are also some instances of *alef* for [i], e.g. *käl+äp* and *äšid+äp* (quoted in the next paragraph), *ig+säz* 'healthy' in ChristManManus, Manichæan fragment r9, *ärdäm+imäz* 'our virtue' in Mait or the instrumental form *siziks(i)zän* 'doubtlessly'

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[63] As yet unpublished; information from P. Zieme.

[64] See the remarks of A.v. Gabain on p.8 of her 1959 edition of TT X.

in TT VI 305, the phenomenon cannot be merely graphic but must be a real case of lowering.[65] Another matter with less phonic relevance is the non-writing of vowels in first syllables in such words as *täŋri, kärgäk, yarlïka-, tärk, käntü, män, sän, kälti* '(s)he came', *bälgür-* 'to appear', *kara* 'black' and others. In original Semitic alphabets, only long vowels were explicit in any way, a feature inherited by some other languages (such as Sogdian) when using such alphabets. With time, complementary systems enabling the explicit expression of all vowels were devised for many languages using such alphabets, but in some of these the use of such complementary means remained optional. With a number of Semitic and Indic alphabets it became the rule to leave only low unrounded vowels (such as [a]) unexpressed. The spelling of the Turkic words mentioned was clearly kept from a time when there were such practices also with Turkic. In some groups of cases, however, the spelling of words without an explicit vowel may nevertheless be phonically relevant; e.g. beside /g/ (e.g. in the suffix *+lXg* more often spelled without than with vowels) or when vowels are absorbed by onset /y/ (e.g. in *ymä* and *ygirmi*).

In later Uygur mss., voiced and voiceless consonant letters (T and D, S and Z etc.) alternate quite freely, clearly without any phonetic or phonological background and without any regular causation.[66] Uygur script does not distinguish between front /k/ and /g/ at all; the two dots, which are supposed to distinguish back /k/ from back /g/, are not used systematically in late Uygur mss. in any case.[67] /ŋ/ is in all Semitic alphabets spelled as N + K – or, in Manichæan script, G – (and not X or, in Manichæan script, Γ) also in back-vowel words; otherwise we find some fluctuations in its spelling in early texts, e.g. *siziŋ* as SYZYNNG in M III nr. 10 r9 (Manichæan writing) or *biziŋ* as BYZYNKK in M III nr. 9 V v6 (Uygur writing). The last mentioned form is actually related to a different phenomenon: the double spelling of consonants in coda position which occurs in Manichæan texts (and also commonly in mss. in Sogdian script). Thus we also have *yäk* (M III nr. 3 r2), *tünärig* (M III nr. 4 r1), *s(ä)väg* (M III nr. 4 r5), *mäŋ(i)zlig* (M III nr. 4 r16),

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[65] *eligin* in TT VI 89 and twice 90 is, however, spelled with *yōd*, even though the vowel is here beside /g/, which often lowers vowels. '*s(ä)vänmiš*' in Yosıpas 75 should, I think, be read as *sïnamïš*.

[66] Gabain 1941: 54 thought that voiceless consonants may have become voiced between vowels, as happens in the Northern Turkic languages today. This is unlikely, since devoicing, the opposite process, is attested in this position just as commonly; a few examples for that are supplied by Prof. Gabain herself on the same page.

[67] Late Uygur mss. were mostly written down under Mongol rule. In Classical Mongolian, which also uses the Uygur script, the two dots mark back /g/ and not back /k/.

t(ä)lgäk (M III nr. 4 v15), *[örk]üčlänmäk* (M III nr. 4 v16), *b(ä)lgülüg* (M III nr. 4 r9), *tep* (M III nr. 4 r4[68]) as well as *äšidäp* and *käläp* in ms. T II D (U 268) r10 and r16 respectively all spelled with double final K and P. The double spelling of letters to fill the end of a line can also be found in Buddhist mss. e.g. with additional W after *bo* 'this' and *yügärü* 'facing' or additional R after *agïr* 'heavy' in TT X 232, 285 and 299 respectively. Note that it here comprises letters representing vowels and not only consonants.

When *y* is in the word onset followed by a front rounded vowel, mss. in Uygur script normally spell this vowel as if it belonged to the back series; e.g. in *yörüg* 'interpretation', *yükün-* 'to bow to someone', *yüräk* 'heart', *yüz* 'face' and 'hundred' or *yügür-* 'to run'. There are a few other words with front rounded vowels in the first syllable which also spell this vowel as W and not as WY, such as *köŋül* 'heart' or (e.g. in TT X 440) *kög* 'music'. The habit of spelling front rounded vowels as WY may have come up gradually, as *yōd*-less spellings for front vowels are much more wide-spread in pre-classical texts than in classical and late mss.. The front variant of the particle *Ok*, which is not a fully independent word, is also spelled without a Y, although it normally has a space before it.

Further spelling characteristics are discussed in sections 2.2 and 2.3.

2.2. *The vowels*

The Proto-Turkic four-dimensional vowel symmetry, still existing e.g. in Yakut, consists of $2^4 = 16$ phonemes generated by four oppositions: back (a, ï, o, u) vs. front (ä, i, ö, ü), low (a, o, ä, ö) vs. high (ï, i, u, ü), unrounded (a, ï, ä, i) vs. rounded (o, u, ö, ü) and long vs. short. In the original Turkic words of Old Turkic, 16 vowel phonemes may have been distinct only in the first syllable; very little is known of the other syllables in this respect. When, perhaps during the course of Old Turkic, the length opposition is given up altogether, there remain 9 vowels: 9 and not 8 because /ä:/ became /e/ and was retained as such.[69] This /e/ appears, at some stage, to have been joined by [e] which was an allophone of /ä/ when followed by /i/. In non-first syllables, vowel

[68] The edition's *tipü*, and *blgülügü* in the previous word, are misreadings. Similar mistakes are found in Fedakâr.

[69] This matter has to do with the genetic comparison of the Turkic languages and is outside the scope of the present work.

harmony in principle[70] left morphology with only four possibilities: with only four pertinent oppositions, between the archphonemes /A/ (realised as /a, ä/), /U/ (= /u, ü/) and /I/ (= /i/ and /ï/; tending to generalize /i/ in the last syllable, particularly when adjacent to palatal consonants) and /X/ (realised as /ï, i, u, ü/, depending both on fronting and rounding). Further allophones of /X/ as well as 'vowel attraction' and vowel changes caused by adjacent consonants will be discussed in section 2.4. /U/ is realised as /o ö/ before /k/, except when the previous syllable has /u ü/; see section 2.51 for that.

2.21. Vowel length

The distinction between original 8 long and 8 short vowels can be very well reconstructed for first stem vowels; it is today retained to a very large extent in Yakut, Turkmen and Khaladj and has left traces and reflexes in a number of other Turkic languages. The most recent and extensive treatment of primary vowel length in first syllables (to where it may originally have been limited) in the modern and historical Turkic languages is T.Tekin 1995a, which also recounts the history of research of this aspect of Turkic vocalism.[71] Unfortunately the author did not include in it a recapitulation of his 1967 paper, which shows that original Turkic long vowels function as long also for the purposes of the *ʿarūḍ* metre of the QB, the 11th century Qarakhanid poem of more than 6000 verses, consistently with the theory that the Proto-Turkic long vowels were preserved in its language. The DLT also appears to make the right distinctions between vowels written only with diacritical vowel signs and those spelled with *matres lectionis* (*alif, wāw* and *yāʾ*, which are the signs of vowel length in the Arabic writing system), especially where a word serves as an entry for itself and is not quoted in a sentence intended to illustrate the use of some other lexeme; this evidence was last brought together in Tekin 1995: 97-113. All in all, vowel length as documented in Qarakhanid sourccs accords well with the evidence in the modern languages. In Kāšġarī's dialect, long vowels

[70] 'In principle' because of a tendency to prefer /i/ to /ï/ as realisation of /I/, because suffixes show back synharmonism with borrowed bases also when their last syllable clearly is in the front class and perhaps some other factors.

[71] This work is a good base for research in which most of the documentation is brought together. Its weakness concerning written documentation is that any sign that a word contains a long vowel is taken at face value and considered conclusive even if the word is, on other occasions, written short; moreover, Tekin trusts a source's evidence also when it writes a vowel as long although no modern language testifies to this, sometimes when even he himself considers it to have been short in Proto-Turkic.

appear to have gotten shortened when stress went on to a suffix. Referring to stems in which the second letter is *alif*, *wāw* or *yā'* he writes in fols. 515-516: "Rule. ... the medial ... letter may drop from the word rendering it biliteral in pronunciation, though not in writing; in its written form the letters remain sound.[72] Example: The 'forearm' is called *qōl*. Then you say *anïŋ qolïn aldï* [here spelled without *wāw*] meaning 'He grasped his arm'. It has become [short] like the word for 'slave', *qul* [in spelling and length], since the *wāw* has dropped out. Similarly *yēl* 'wind'; in the course of speech you say *anïŋ yeli küčlüg* 'His wind is strong' ... . It has become like the word for 'year', *yïl* [in spelling and length]. This is the rule for all nouns and verbs ...'.

In the runiform writing system, first syllable vowel length differences can be expressed only for /a/ and /ä/, since the presence of these sounds in first syllables is understood implicitly without recourse to the A character; other vowels have, in general, to be written out (although there are exceptions in some of the inscriptions). The explicit presence of this character can then in principle be used to mark /a:/ and /ä:/. This is done rather consistently for /a:/ in some mss. in runiform script, namely IrqB, Dispute and BlattRun: They have *a:gu* 'poison', *a:la* 'motley', *a:k* 'white', *a:rt* 'mountain pass', *a:ra* 'between', *a:š* 'food', *a:t* 'name', *a:z* 'few', *a:z-* 'to stray', *a:zu* 'or', *ba:-* 'to bind', *sa:kïn-* 'to think', *ta:š* 'stone', *ta:t-* 'to taste', *ya:š* 'fresh grass' and some derivates from these stems.[73] These mss. only have very few questionable cases like *ada+r-t-* 'to harm' and *añïg* 'evil' where we do not know whether the explicit *A* in the first syllable is a reflexion of real vowel length for lack of modern documentation, and there are a few additional cases (like *yaš* and *ara* in the IrqB) where a word spelled with long vowel also shows an instance without explicit A.[74] Where explicit A is, in these mss., used for marking the vowel /ä/, its presence does not appear to indicate length, as the words in which it is used have long vowels in no other source. The practice described here must have been known already to

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[72] As Kelly 1973: 156f., who quotes and comments the passage, remarks, this refers to Uygur writing, where vowel letters do not drop when the vowel is no longer long. This paper is an important contribution to the question of vowel length in Qarakhanid.

[73] 1 r5 of the edition of TM 342 (followed by Tekin 1995a: 91) writes the verb *yarat-* as if it had an explicit A in the first syllable, but the perfectly clear facs. shows this not to be the case. No Turkic language has *yarat-* with a long first-syllable vowel.

[74] Other mss. are more problematic: TM 326, e.g., shows *sa:v* 'speech', whose vowel is known to be long from elsewhere, with A, but also spells *sat-* 'to sell', which probably had a short vowel, with A as well. The proverb collection reedited by Hamilton and Bazin in *Turcica* 4-5: 25ff. writes the *a*s in *tanuk* and *tamga* with *A* although they are short in the Turkic languages which retain length.

the scribes of the Orkhon inscriptions: *a:č* 'hungry', *a:č-* 'to be hungry', *a:t* 'name, title' and *ta:m* 'wall' (KT SE), the only words which are spelled with explicit A in the first syllable in the KT, BQ and KČ inscriptions, do indeed have Proto- and Common-Turkic lengths. Here, however, this practice was applied in an inconsistent and limited way: The word for 'name' was more often spelled without A than with it, and *a:k* 'white', *a:ra* 'between', *a:z* 'few', *ba:-* 'to bind' and *sa:kïn-* 'to think', which appear with A in the quoted mss., do not have it in the Orkhon inscriptions. Nor are *bar* 'there is' and *bay* 'rich', which have long vowels in the modern languages, spelled with A in Orkhon Turkic. That the expression of vowel length is not part of the Orkhon Turkic writing *system* was already observed by Hovdhaugen, 1974: 61. Some additional evidence from the Yenisey inscriptions has been listed in Tekin 1995a: 90-91; it should, however, be checked on the base of newer or more responsible readings of these inscriptions. Doerfer 1981-82a: 111-2 has tried to explain the absence of A in some stems with long vowels by the hypothesis that the stem started with /h/, after which the long vowels are not supposed to appear; he thinks that /ā/ is spelled with A only when the word *starts* with this vowel. This is not the case, as shown by the spelling of *ta:m*.

In Uygur mss. in both the Manichæan and (much more numerously, naturally) the Uygur script we find that vowels are sometimes written doubly. Scholars have tried to interpret this in two ways. It was stated in the notes to U II 23,14 and 39,89 and then by Zieme 1969: 32 (and cf. Meyer 1965: 190 n.19) that these spellings may be an attempt to distinguish /o/ and /ö/ from /u/ and /ü/. The fact is that most instances represent rounded vowels: There are no *aa*s,[75] as initial ' is *ä*, initial '' *a*; medial '' and initial ''' do not seem to occur. There is one single word spelled 'YY[76] and there are few words spelled with medial YY (to which we return below). Zieme quotes a number of instances of /o/ and /ö/ written doubly, giving place references.[77] Others, on the other hand,

[75] Tekin 1995a: 92 misunderstood the n. to M III 17, which says that *ät* 'flesh, meat' is sometimes spelled like *at*, and does not refer to *at* 'name'.

[76] Rather common, signifying 'plant' and possibly with a long vowel like all monosyllabic lexeme stems of the shape CV; the first vowel of its derivate *ï+gač* is short, however. Here and subsequently. C refers to any consonant, V to any vowel (not to be confused with the labial consonant *v*).

[77] He gives *booš* 'empty', *boo* 'this', *noom* 'teaching', *ool* 'that', *oon* 'ten', *oot* 'fire' and 'grass', *ootačï* 'healer', *soorgun* 'a plant', *ooz-* 'to prevail', *toog* 'dust' from Manichæan, *booš* 'empty', *noomla-* 'to preach', *ool* 'that', *koog* 'atom', *oot* 'fire', *kool* 'arm', *kooš* 'a pair', *toor* 'net', *tooz* 'dust', *öö-* 'to remember' *ööč* 'revenge', *ööčä-* 'to take revenge', *söö* 'a long time' from other sources; /ö/ is here spelled as WYW.

have said that such repetitions are meant to be read as long vowels: This was the opinion of Gabain 1941 §16 (who also quotes some of the instances), Tuna 1960: 247-252, Pritsak 1963 §10, Ščerbak 1961: 34-36 and 1966: 153-154 and Tekin (1975) 1995a: 91-94. Thus e.g. *uu* 'sleep' in Abhi (a rather late text) 511, 514 and 516 and *uučsuz* 'endless' seven times in Abhi, both words with vowel length. The double spelling of vowels is especially regular in some Chinese borrowings such as 'dragon' (spelled LWW), 'army' and 'preface' (both spelled SWW), 'women's quarters' (spelled KWWN) etc.; this phenomenon should be separated from the double spellings of Turkic words: In these cases the spelling *may* also indicate diphthongs ([uo, üö]), and in any case touches upon the pronunciation of the Chinese dialect which served the Uygurs as contact language. The word signifying 'preface' (in this book transcribed as *swö*) appears with *+sI* in HTs VII 18 but with the accusative suffix *+üg* in HTs VII 306, perhaps indicating that a pronunciation as *süw* was an option. Leaving these instances aside, we find that there are numerous counter-examples for both hypotheses: *uu* 'sleep' (spelled as *uv* in U III 11,8, but gets the possessive suffix with *s*), *uuč* 'tip, border, edge', *uutun* 'vile, insolent' and *yuul* 'spring, fountain' (e.g. in HTs, BT III and Suv) are, together with their derivates, some of the more common words spelled with WW which have *high* back rounded vowels.[78] *tooz* 'beech bark', *koor* 'embers', *tuuš* 'counterpart', *uuz* 'expert', *yüüz* 'face' are among the lexemes with long vowels attested with double W and not mentioned by Zieme. On the other hand, some of the stems attested with double vowels, e.g. *ok* 'arrow', *ol* 'that', *ot* 'grass', *kol* 'arm', *tor* 'net', *oz-* 'to prevail' or *ul* 'sole', have short vowels in Turkmen, Yakut etc. and presumably had them in Proto-Turkic as well. The word for 'wind' is often spelled as YYYL although its vowel is short in the modern languages; it might, perhaps, have been pronounced with a diphthong, *yiel*.[79] The general impression, after looking at quite some texts, is that double spelling tends to occur more with /o/ than with other vowels, and more with long vowels than with short ones, but that it is not all too common in general, single spelling

[78] Examples quoted in Tekin 1995a: 93. *uut+suz* 'shameless' (U II 86,40), also quoted there, is a different case: It is clearly a contraction of the well-attested *uvut*, which has the same meaning. Oguz *utan-* 'to feel shy' is mentioned already in the DLT; the fact that this verb still has a /t/ in Turkish shows that it is not in the same class as the other long vowels (which get followed by /d/).

[79] *yäm*, which is used for *äm* in U I 7 (Magier), may also stand for some such diphthong as *iäm*.

being more common for all words mentioned; some lexemes (with long or short vowels) tend to be more prone to this phenomenon than others.

The ability of some scripts of Indian origin to distinguish between long and short *a*, *i* and *u* is not put to any discernably systematic use; least of all the BuddhKat with its Tibetan script. Tekin 1995a: 94-96 limited his research on this matter to TT VIII and lists only those cases where a vowel spelled as long correlates with a vowel he expects to be long; the opposite case is mentioned only with a few examples: He does admit, though, that it happens that long vowels are spelled as short and vice versa. See also Maue 1996: XXI for the Brāhmī practice in general. For *i*, the distinction is rare even in Sanskrit portions of the mss.; for *a* and *u* there appears to be free alternation between the signs for short and for long vowels. In the Uygur-Khotanese word list the character *ā* expresses [o] and [ö] and there is no correlation with comparative length at all. Either the language no longer kept up the Proto-Turkic length distinction when the Indian scripts came into use for Uygur (in the 10th century?), or the Central Asian linguistic filters, through which the scripts went before reaching Turkic, had made the distinction into a purely orthographical (i.e. not phonetic) one or into one distinguishing certain qualities of the vowels but not their length. Transcribing inscriptional or Uygur texts as if their language consistently distinguished between long and short vowels (as done e.g. in the glossary of BT III) therefore seems misleading.

2.22. The vowel /e/

The nine vowel phonemes left after distinctive vowel length was given up were /a/, /ä/, /ï/, /i/, /o/, /ö/, /u/ and /ü/ plus the phoneme /e/. As shown by Thomsen Hansen 1957, the last-mentioned came from Proto-Turkic long */ä:/ (especially in the first syllable). The opposition between /a/ and /a:/ seems to be still documented in early Old Turkic but that between the six other long vowels and their ‚normal‘ counterparts appear to have disappeared already by our earliest texts.

The opposition */ä:/ > /e/ vs. /ä/ was, however, retained, apparently because it involved an opposition in vowel *quality* as well, disrupting the three-dimensional close-knit structure of the original vowel system. Saving this cube structure appears to have been Bazin‘s only motive for not recognising /e/ as an Old Turkic phoneme, a view approvingly quoted by Zieme 1969: 33.[80] Zieme 1969 expressed disbelief in the

[80] Zieme has, of course, changed his view quite some time ago, but Johanson 2001: 1723a still thinks that it is “kontrovers ... ob dem *ä* ein höheres *e* gegenüberstand”.

phoneme /e/ as distinct from /ä/, though he did admit the reality of the sound [e] and mentions phonemic oppositions such as *älig* ‚hand; fifty‘ vs. *elig* ‚king‘; cf. also *et-* ‚to arrange‘ vs. *ät-* ‚to emit a sound‘. /e/ did, in fact, stay distinct from both /i/ and /ä/; its early existence in first syllables can be reconstructed from modern Turkic languages (e.g. Azeri or Anatolian dialects). The Middle Turkic Nahju ’l-Farādīs distinguishes between [ä], [e] and [i] by spelling the first with *fatḥa* (sometimes together with *alif*), the second with *fatḥa* and *yā’* (cf. Clauson 1962: 163) and the third with *kasra* (sometimes together with *yā’*). The spelling of coda /e/ as *fatḥa* plus *yā’* appears already in the DLT, e.g. in the word *süvre* ‘pointed’. Concerning Old Turkic proper, the evidence is as follows: It is always spelled with Y in Uygur ms. sources written in Uygur, Manichæan and also runiform script, with Ä or I in mss. in Tibetan script, with Ä in Wordlist (Khotanese Brāhmī), but it is spelled with explicit E in the bulk of Brāhmī manuscripts.[81] All instances of /e/ in non-first syllables are linked to a preceding /e/ and therefore clearly conditioned by it. /ä/ and /i/ are never spelled with Brāhmī E. Exceptions (e.g. once *kičä* where one would expect *kečä* for ‘evening’, once *ti-* ‘to say’ etc.) are quite rare and can be considered mere errors; they may be reflexes of the spelling of Uygur script. Thrice *elig* for *älig* ‘hand’ may rather have come about through regressive assimilation; the same may be true for thrice *el(i)t-*, which exists beside *ält-,* and for the numerous instances where ‘to hear’ is spelled with onset *e* beside two Brāhmī instances where this verb is still spelled as *äšid-* (cf. section 2.401). In most runiform inscriptions we find a fluctuation between *i*/*ï* and implicit notation (otherwise to be understood as *a* or *ä* in the first syllables of words in the Orkhon inscriptions), whereas no such fluctuation is ever found either with /ä/ or with /i/.[82] The

[81] 5 times *bečin* / *bečen* ‘monkey’, *bel* ‘waist’, 6 times *ber-* ‘to give’ (with derivates), 18 times *beš* ‘five’, *egil* ‘lay person’, 5 times *el* ‘tribe’, 5 times *elig* or *eleg* ‘king’, thrice *el(i)t-* ‘to carry off, lead away etc.’ vs. once *ält-*, *enč* and twice *enčgö* ‘peace’, *ešič* ‘pot’, 13 times *ešet-* / *ešit-* / *ešid-* ‘to hear’ (with derivate) vs. twice *äšid-,* 4 times *et-* ‘to prepare’ (including derivates), 9 times *eyin* or *eyen* ‘following’, 4 times *ken(ki)* ‘later, after, finally’, 5 times *keŋ* ‘wide’, 7 times *kertü* / *kertö* ‘true, truth’ and derivates, 8 times *ket-* ‘to depart’ and derivate, *lešp* ‘phlegm’, *men* ‘flour’, *sezin-* ‘to sense’ and 6 times *sezik* / *sezek* ‘doubt’, about 60 times *te-* ‘to say’ and *te-t-* ‘to be considered to be’ (vs. once *ti-*), *terek* ‘poplar’, 6 times *tetse* / *tetsi* (thus once, possibly to be read as *tetsï*) ‘student’, twice *telä-* vs. twice *tilä-* ‘to wish’, twice *ye-* ‘to eat’, 29 times *yeg* ‘better’, twice *yel* ‘wind’, *yemiš* ‘fruit’, *yenä* ‘again’, 8 times *yer* ‘ground’, twice *yertinčü* ‘world’, *yeti* ‘seven’, *yet-* ‘to reach’ and *yez* ‘artemisia (a plant)’.

[82] *ilgärü* in KT E21, spelled by the editors without onset I, appears to be the only exception; according to Doerfer 1994: 108 it is spelled with a ligature consisting of I and l^2 and not in defective manner. For *äl(i)t-* ~ *el(i)t-*, the spelling with onset I in BQ

practice of scholars in Turkey and of the early Berlin school (the tradition going from Müller and Le Coq through Bang, Gabain and Zieme, corrected in recent years) of spelling /e/ as *i* is unjustified: The distinction between *o* and *u*, e.g., is based on just such evidence as between *e* and *i* (and stands, in a few cases, on just as shaky legs). We may not always be completely sure, but the informed guess founded on as much information as possible must be made. Some South Siberian runiform inscriptions even have a special character for *e* (whereas other inscriptions from that area have instead a letter for *ä* which distinguishes that phoneme from both *a* and *i*). The fluctuation referred to turns up also with a few instances of Proto-Turkic **ä* appearing adjacent to /y/: The (apparently rather early) change *yä* > *ye* created additional /e/s which were not (originally) long, perhaps e.g. in *yet-* 'to suffice'.[83] This is a simple case of assimilation (still taking place in Azeri, which still has the nine vowel system). Orkhon Turkic fluctuation should not be confused with one or two cases where there appears to be a dialect variation between /ä/ and /i/: There is, in Old Turkic, both *äki* and *iki* ‚two', but this word probably had no /e/: Orkhon Turkic consistently has /ä/ but sources in Brāhmī and Tibetan writing have numerous examples with *i* (not *e*). Manichæan texts fluctuate (there is, e.g., *äkigün* 'as a pair' and *äkinti* 'second' in M III $14,6_1$ and $15,17_1$ respectively) while non-Manichæan sources in Uygur script consistently have 'Y. Much evidence concerning the spelling of Old Turkic (and not only inscriptional, in spite of its title) /e/ was brought together by Doerfer 1994.

2.23. The vowel /ï/

Some scholars, e.g. Pritsak 1961: 32 and 1963: 52, denied that there is an opposition /i/ : /ï/ in Old Turkic; cf. also Johanson 1993: 87 and

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E19 (as against seven instances of defective spelling in Tuñ and KT) appears to show that the variant *el(i)t-* was old. Doerfer (p. 109) finds that there is a great difference between the Ongin, KČ and Tuñ inscriptions, which he considers to be older, and the KT and BQ inscriptions, which he takes to be later, in that defective spelling predominates in the former, I in the latter; he also found that, among the inscriptions of the Uygur steppe empire, Tariat and Tes follow the older, ŠU the newer tradition.

[83] After original long vowels, voiceless consonants become voiced in Turkish when they appear between vowels; this does not, however, happen in the aorist form *yet-er* (unlike *yedek* < *yet-* 'to lead on', which was originally applied to a horse one led with oneself to mount when the horse one was riding got tired). The sequence #*yä* no longer exists in Brāhmī sources.

Röhrborn 1996: 181f.[84] In original Turkic words the opposition can of course only be found in first syllables, as synharmonism regulates their alternation in non-first syllables, cancelling their opposition in them; this is so for all other vowels as well. The language does appear to have this phonemic opposition in first syllables, in view of such pairs as verbal *tïk-* ‚to stuff' vs. *tik-* ‚to erect' and *sïk-* ‚to squeeze' vs. *sik-* ‚to copulate (male subject)', or nominal *kïr* 'mountain' (and *kï:r* 'grey') vs. *kir* 'filth', *ïrk* 'omen' vs. *irk* 'ram' and *kï:n* 'sheath, scabbard' vs. *ki:n* 'navel; musk'; these are shown to differ by the fact that their velars are spelled differently in most of the writing systems. The pairs *kïš* 'winter' vs. *ki:š* 'sable', *sï:k* 'shallow' vs. *sik* 'penis' *kiz* 'box etc.'[85] vs. *kï:z* 'girl' and 'costly' and *kïr-* 'to scrape off' vs. *ki:r-* 'to enter' are at least near-minimal, as their vowels are of different length, in so far as the length opposition was kept up in dialects of Old Turkic: Evidence for this is, however, rather weak; my spelling of 'to enter' as *ki:r-* in the previous sentence may therefore be anachronistic. The opposition *ïrkla-* 'to consult the omens' vs. *irklä-* 'to tread on something' may have been perfect only for some varieties of Old Turkic, as the latter verb appears to have had an onset */h/.[86] Strangely enough, finding such pairs in words involving /g/ seems to be more difficult: There is *tïgra-* 'to be tough' (rare, but cf. *tïgrak* 'tough') vs. *tigrä-* 'to emit certain sounds', and cf. *yigtür-*, a hapax in the DLT which might signify 'to squeeze', vs. *yïgtur-* 'to cause to heap'. As against *iglä-* 'to be or become ill' we have *ïgla-* 'to weep', but the more common variant of the latter is *yïgla-*, pointing towards **hïgla-*. Oppositions not involving velars, which receive suffixes in their back-vowel and front-vowel alternants respectively, are even harder to come by. One example is *tïn* 'breath, spirit' vs. *tin* 'halter'; both words are spelled with and without *yā'* in the

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[84] Röhrborn bases his opinion on evidence from the rules of rote rhyme (which serves as base for Old Turkic verse and makes stanzas accord in their beginning and not in their end), stating that *ï*° and *i*° are made to rhyme. However, *ï*° not only rhymes with *i*° but also with *e*°; *o*° rhymes with *u*° and *ö*° with *ü*° and even *na*° (in *nayrag* 'Buddha's characteristic mark') with *a*°: Old Turkic clearly followed eye rhyme (as opposed to ear rhyme), which was in use in Ottoman verse as well: The rhyme was visual and not auditive; since *o* and *u look* alike in Uygur and Manichæan writing, the two (and similarly the members of the other sets) were made to 'rhyme'. If, therefore, *p*° of foreign words is considered to alliterate with *b*°, this should not be considered evidence for absence of any phonic difference. Rote rhyme therefore cannot help us solve this problem.

[85] DLT and base of the common verb *kizlä-*.

[86] The *y* in *yilkä-* in UigPañc 66 and 88 (with normal metathesis and loss of /r/ before /k/) must be a reflex of that. Nor would *ïrkla-*, which is an ad-hoc derivate from *ïrk* 'omen', be prone to such phonetic processes.

DLT. If one does not insist on staying within one part of speech one could mention *sïz*, the imperative of the verb signifying 'to ooze'[87] vs. *siz* 'you (pl.)'. Otherwise one seems to find only imperfect pairs such as *tï:t-* 'to tear to shreds' (and *tït* 'larch tree'[88]) vs. *tit-* 'to renounce', and *ïl-* 'to descend' vs. *i:l-* 'to catch, cling, attach'; the last mentioned verb in fact originally started with an /h/, as the numerous examples with *#y°*[89] show. Johanson 1991: 85 gives the DLT opposition *il-* : *ïl-* as an example for the reality of the front / back distinction in Qarakhanid. Kāšġarī (fol.94) does, indeed write that the infinitive of the former is spelled with *kāf*, that of the latter with *qāf*, and that the former's aorist is *ilär*, the latter's *ïlur*. The aorist distinction between the two verbs is borne out also by the QB; not, however, the backness distinction; there, both verbs are front: From the verb signifying 'to descend' we find *ilgü* in QB 1086 (ms. AB; C replaces it with the better-known *en-*) and *ilmäk* in 1762 (only C; A *yïlmaq*, B *enmäk*); the meanings are clear in both cases. Although, therefore, the grammarian Kāšġarī living in Baġdād was aware of the backness of the verb signifying 'to descend', that no longer corresponded to Qarakhanid usage of his time, at least as far as Yūsuf is concerned. The opposition /ï : i/ thus seems to be rather linked to the presence of /k/ and /g/; we know that the front and back realisations of /k/, transliterated as *q* and *k* respectively, are audibly different in all Turkic languages, and should have been so in Old Turkic as well. Note the runiform character ïq ~ qï, which is used for representing voiceless velars specifically when they appear beside /ï/. We might therefore consider following Dankoff & Kelly 1982: 61-62, who dispense with /ï/ as a phoneme altogether, assuming a phonemic distinction /k/ : /q/ (as e.g. in Arabic) instead, and complement it with an opposition /g/ : /ġ/. How do we know, in fact, that the opposition is not merely an underlying one, as e.g. in Classical Mongolian, where there was no [ï] but only [i]? Because the Mongolian writing system (coming from the Uygur script) always uses K and not X with /i/, the opposition manifesting itself only in the synharmony of subsequent

[87] There is no reason for this verb to have had a long vowel as it does not have one in modern languages; the EDPT ascription of vowel length is apparently based on the spelling in some of the DLT instances, which are influenced by Arabic word patterns.

[88] The DLT spelling of this with *yā'* as second letter could be due to Arabic triradical word patterning.

[89] I use the degree sign as a sign of abbreviation, as done in transcriptions of Sanskrit; this means that there are further sounds to follow, that – in this case – this is /y/ at the beginning of a word.

syllables,[90] whereas Old Turkic does distinguish between front and back consonants also in the same syllable as these vowels. In the runiform script this is the case not only with /k g/, as in the Semitic writing systems, but also with /b t d y l n r s/, in some Yenisey inscriptions also with /ŋ/: Thus *ïdok* 'sacred' is spelled with d^1 in the Orkhon inscriptions, *ïdtï* 'he sent' as It^1I (due to assimilation of the alveolars) and so forth. Dankoff & Kelly's view therefore cannot apply to Old Turkic as a whole; nor would one gain anything by adopting it for Qarakhanid, because [k] and [q] would still have to function as allophones in all syllables having vowels other than the high unrounded ones. Still, as there was little functional load on the opposition /ï/ : /i/ except in the contiguity of /k/ and /g/, this opposition was bound to weaken, were it not for synharmonism and for the symmetries of the harmony system.

A breakdown in the syllable of the vowel itself, not making the whole word follow suit, can be observed best when the scribe used runiform writing, in which the front and back alternants are distinguished for most of the consonants. In Orkhon Turkic the commonest consonants with this phenomenon (listed in Tekin 1968: 71-72) are /s/ and /y/, e.g. in s^2Iy^1U = *si-yu* 'breaking' or $y^2Imšak^1$ = *yimšak* 'soft'. Cf. even *sigït* 'sob' spelled with s^2 but g^1. Such instances do not *have* to be of phonic significance, however, as s^2 and y^2 are sometimes used in the Orkhon inscriptions also in conjunction with the back vowels /a/, /u/ and /o/ (though s^2 and y^2 are admittedly a bit more common with /ï/); see Tekin 1968: 39-40. Examples with /t/ are $t^2Iŋl^1A$ = *tiŋla* 'listen!', t^2Id^1A = *tid-a* 'holding back' (KT N11) and $t^2Il^1g^1$ = *til-ïg* 'the news (acc.)' (Tuñ 32). Nor is it easy to classify the fronting in Id^2mIs^2 = *id-miš* < *ïd-* 'to send' in O F2, as the *-mIš* suffix is always spelled with front *s*.

It is rare for a front consonant to appear not before but after **ï*; I would therefore take the verb to really have been pronounced as *id-* in this case (before *-miš*!). Note, in this connection, the n^2 appearing in the codas on the 3rd person possessive, the volitive and the negative converb suffixes *+(s)I(n+), -(A)yIn* and *-mAtI(n)*, also when added to bases with back synharmonism. The high vowels of these three suffixes and of *-mIš* may, in the Orkhon inscriptions, always have been pronounced as [i] and not as [ï]: The consonant of the instrumental

[90] I mean the fact that the genitive of the 3rd person demonstrative, e.g., is *inu* and not **inü*. Even assuming genetic relationship between Turkic and Mongolic, however, the situation in Mongolian cannot be used as an argument for believing in a neutral /i/ in Proto-Turkic, as some other details make it likely that the opposition /i : ï/ was a real one in Pre-classical Mongolian.

suffix *+(X)n* is never spelled as n^2 even when its expected vowel was /ï/. Such fronting found in Orkhon Turkic becomes marginal in the inscriptions of the Uygur steppe empire and completely disappears in the runiform mss., which are in the Uygur dialect. We have no way of knowing how these suffixes were pronounced by the authors of Uygur mss. in other scripts, but cases like the consistent Uygur spelling of the suffix sequence *-mIš+kA* with the letter X come to show that the fronting of /ï/ in suffixes was subphonemic if it existed at all. The language of the Second Türk Empire thus shows synharmonism irregularities related to the presence of /ï/ while no such phenomenon is discernible in Imperial or Xinjiang Uygur, also where written in runiform script.

The contiguity of the palatal consonants *č*, *y, ñ* and *š* was no doubt one of the early factors causing the first-syllable passage *ï* > *i* to affect the whole word: e.g. in IrqB 53, where *bïš-* 'to ripen' is used in the form *biš-di*, spelled with b^2 and d^2; similarly the converb form *bič-ä* 'cutting' appears to have been used in IrqB 37, whereas Uygur normally has the verb in the form *bïč-*. Similarly *ïy-* 'to suppress', whose fronted forms and derivates are partly documented in the OTWF (see index). Another word with a palatal consonant which got fronted at an early stage is *ï:š* 'work': Its numerous examples in the DLT have back vowels with a single exception; we find *ïšlarïg* in Pothi 80 (Manichæan) and the instance spelled 'YS'NK'ZN in M I 10,13 is likely to have had back vowels.[91] However, two examples in the (equally Manichæan) Xw have suffixes with front *k*; that is the rule also in Uygur texts and *išlä-* and its derivates have front vowels in the DLT. The existence of *inčä* beside *ïnča* should also be ascribed to fronting with the concomitant influence of /č/ (though other explanations are also possible for the existence of this variant; see section 3.132). *yiltizlig* in BT XIII 12,53 shows that *yïltïz* 'root' had a fronted variant.

bïrgarudun sïŋar 'in the direction towards the south' in M III nr.4, $10,14_1$ (ms. U 47 in Uygur writing; double-dotted X) shows that the numerous forms of *birdin*, *birgärü* and *biryä* in Orkhon Turkic and other Manichæan sources must all be secondary.[92] *ï* 'vegetation'[93]

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[91] /ï/ is more often spelled with *alef* in preclassical texts than /i/. Scholars have confused *ï:š* 'work' with *eš* 'debt', the two lexemes surviving in Yakut as *i:s* and *iäs* respectively. What the runiform inscriptions have in a binome with *küč* is *eš* 'debt' and not *ï:š* 'work', which explains the front vocalism; cf. OTWF 456 (with n.55) for additional details.

[92] Clauson (EDPT 361) assumes that the instance is an error; this would have been likely if the ms. had been in Manichæan writing, where G and Γ have rather similar shapes. As it is, we cannot simply 'emend' it away.

normally has back vowel suffixes but appears with a fronted dative suffix in Ht V 4 a24. *tül* 'tongue', finally, has no palatal consonants and is well attested with back harmony (also still in the DLT's derivates *tül+ak* and *tül+ük*-) but appears as *til* with suffixes showing front *k* e.g. in U II 7,10, U III 72,28, KP 12,2 and the DLT.

When we find the word for 'thousand' spelled with b^2 in BQ S1 and Tuñ 14 (as against b^1 in Tuñ 16 and 18), we cannot know whether any suffix added to it would have had front or back vowels. I would assume that the pronunciations *büŋ* and *biŋ* existed side by side, or that the actual pronunciation was in between, i.e. that the opposition was neutralised. The older pronunciation is supported by *büŋa*, a term denoting a military unit among the Uygurs of the Steppe Empire (attested at least thrice in ŠU) and by the second vowel of *minggan*, the Mongolian word for 'a thousand'; the latter by *miŋlig* in TT II,2 57 (an early Manichæan text). The situation of a conservative and a progressive variant existing side by side is made use of in the QB for poetic purposes, when we find both *tül* and *til* used to suit the rhyme. When there are fluctuations, I take all /ü/s to have been primary and the /i/ variants to have been secondary: I take this direction to be the more natural one in the absence of any additional factors (as e.g. glottalization would have been). I therefore take Turkmen *ü:z* 'trace, track' to show the original shape of what sometimes appears as *iz* in Old Turkic.[94] Note that none of the stems mentioned as having passed from back to front harmony contained any velar consonants: It would seem that velars prevented the passage ü > i in the stem.

Most Turkic languages today do have an *ü*, both phonologically, i.e. for the intents and purposes of synharmonism, and phonetically. A few have, through centuries of intensive language contact, fronted the /ü/ phonetically but have left its phonemic value unchanged, e.g. Urban Uzbek or Standard New Uygur under Persian / Tajik influence. Looking at the Turkic world as a whole one finds that *ü* has, all in all, shown itself to be very resilient. What contact influence could the speakers of Old Turkic have undergone? The early Turks were, till the 9th century, bilingual mainly in Chinese and Sogdian. From Chinese they borrowed words with /ü/, e.g. *mür* 'honey', *čün* 'true', *šük* 'a measure of capacity',

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[93] I take the original shape to have been **hü*, in view of the fluctuations in the shape of *(y)ügač* 'tree', which probably was a derivate from this. There is no reason to assume vowel length, as done by Clauson and Tekin, in spite of the spelling with two *yōd* in Uygur.

[94] I disagree with T.Tekin 1995: 183 on this lexeme; the QB has it with both front and back forms of the accusative.

sïr 'lacquer' or *čïg* 'a foot (as a measure of length)'. Sogdian short /a/ has been taken to have had central vowels as allophones. When we find that the Sogdian word for 'sandalwood', transliterated as *cntn* and ultimately coming from Sanskrit *candana*, is borrowed into Old Turkic as *čïntan*, we take it that the Uygurs got their /ï/ from Sogdian.[95] The language which the Turks mostly got into contact with when, most numerously from the 9th century on, they streamed into the North Eastern part of the Tarim basin, was Tokharian. The Tokharian *schwa*, transliterated as *ä*, can, in certain circumstances, perhaps be stated to have been less front than /i/ and higher than /a/; the Uygurs might perhaps have assimilated it to their [ï]. It does not, in short, seem likely that the languages which Uygurs can be presumed to have been bilingual in would induce them to abandon their /ï/.

The contact situation could have been different in West Turkestan, where Qarakhanid developed, especially when New Persian started to be the *lingua franca* in the 10th century. In the DLT the opposition /ï : i/ in so far as it affects suffix harmony is retained approximately to the same degree as in Uygur: Dankoff & Kelly 1982: 61 give a longer list where original harmony exists and where stems consistently show back or front vowel suffixes respectively, and a shorter list of stems with fluctuations. Some of the fluctuations have already been mentioned, as they reflect a situation found already in Uygur; others are due to errors on the part of the editors[96] or to the second hand which changed around a lot in the ms.[97]

Most of the writing systems used for writing Old Turkic do not have a special character for [ï] and generally use for it the same character as for [i]. There is, however, one alphabet, not much used for writing this language, with which a distinction does appear to be made: As stated already by Gabain 1974: 391 (note 14), texts written in Tibetan script

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[95] Uygur does not itself raise vowels. We know that the Uygur vowel was /ï/ and not /i/ because it is attested in the runiform Irq Bitig spelled with n[1], the back N. I don't think Sogdian had *i* in the first syllable of this word, as that would have been spelled with *mater lectionis*, i.e. Y.

[96] *bičäk* 'knife', e.g., attested in Uygur and the DLT, does not come from *bïč-* but is a deminutive from *bi:* 'knife'; the base of *tišä-* and its derivates is not identical with *tï:š* 'tooth'.

[97] The Middle Turkic 'corrector's' work is well discernible by its different ink. It changed *tizlä-mäk* to *tïzlamaq*, e.g., whereas *tiz* 'knee' never had a back vowel. *yid+i-mäk* 'to be putrid, to stink' is also by the second hand, while the first hand still wrote *yïdïmaq*, reflecting original pronunciation. For *yïlï-š-* it was apparently the first hand which wrote down both possibilities, both *kāf* and *qāf*, but then this stem has two palatal consonants.

do seem to make the difference, though the means are highly irregular. This statement is largely corroborated by Maue & Röhrborn 1984: 292-4 for the Catechism, the relatively early and most important such text.

Another important feature speaking for the reality of /ï/ is the alternation *alef* ~ *yōd* in non-first syllables, much more common in back than in front synharmony, whether it be the mere graphemic alternation described in section 2.1 or the phonetic lowering caused by /g r l/, documented in section 2.402. These two phenomena, which gave the same result but have a different distribution both in terms of sources and of phonetics, can be explained only if [ï] was a phonetic reality in non-first syllables beside /ï/ being a phonological one. /ï/ may often have been fronted in first syllables except where a velar was around, both as a synchronic alternant and as a diachronic process; this did not, however, generally have any effect on subsequent syllables, which stayed back-vocalic. The presence of /ï/ outside first syllables appears to have been quite solid, except in a few suffixes such as *-mIš*.

2.24. The archphoneme /X/

The widespread view that the vowels serving as realizations of /X/ were 'reduced' (the graphemes *ï* and *u* representing '/ă/', the graphemes *i* and *ü* '/ĕ/') is unfounded; in section 1.33 above I quote some authors' thoughts on this matter. Most recently, Johanson 2001: 1725b has expressed the view that the element "°" (as he calls it iconically) "in phonetischer Hinsicht vermutlich ein *schwa* oder reduzierte Vokale (*ă*, *ĕ* usw.) darstellte". Vowels of the archphoneme /X/ are usually not written explicitly in runiform texts; nor, however, are vowels of suffixes containing other archphonemes if their realisations show the same phonemes: e.g. /u/ in the suffix *-gUr-* (not *'-gXr-'*) of *tur-gur-u* (Irk Bitig), where the previous syllable contains an /u/. Vowels of all archphonemes can get syncopated in non-first non-last syllables (by no means only /X/, as still maintained in Johanson 2001: 1723a), syllable structure and consonant tactics permitting, e.g. /I/ in the stems of the common *ögr-ünč*, *ögr-ünčü* and *ögr-inčü* < *ögir-* or *kürgäk* < **küri-gäk*, /U/ in *ärgür-* < **ärü-gUr-, čomrurlar* (DKPAMPb 70) < *čom-Ur-* or *šïšrun-* < **sïš-Ur-Xn-*; /A/ in *ötl-üm* < *ötä-l-* as discussed in OTWF 293, *tirgök* < *tirä-* or *targak* from *tara-*.[98] *ört-*, a variant of *ör-it-*, and *yort-*, a variant of *yorï-t-*, also result from the syncopation of /I/. Syncopation is well documented within stems (as described in section 2.403), before

[98] Low vowels are, however, less readily syncopated than high vowels, as shown by lexemes such as *yarašï, täŋäši* and *yöläši.*

and in derivational affixes and even perhaps within inflexional suffixes. Onset vowels of postclitics (of any archphoneme) are elided after vowels (e.g. *inčäk* < *inčä ök* 'just this way' in the runiform ms. TM 342, 2 v2); so are suffix vowels in the coda if the next word starts with a vowel (at least in verse, as poetic licence).

There appear to be no suffixes ending in /X/. This is, again, no proof that /X/ was shorter than the other vowels. Nor is the fact that Mongolic cognates of Turkic words often have a different additional vowel a sufficient reason for assuming that that vowel can be attributed to Turkic. *är* 'man', e.g., does not necessarily come from **ärä* only because that form existed in Mongolic (to use the example given by Johanson 2001: 1723a): Mongolic *ärä* may, e.g., have been copied from the plural form *äränn*, the /n/ getting metanalysed through analogy with Mongolic °*n* stems.[99] Mongolian *saγa-* 'to milk' does not go back to Proto-Turkic **sagă-* either, as assumed by Róna-Tas 1998: 72: Mongolian 'X' is a spelling convention for [a:]; that it has no phonetic or diachronic significance whatsoever is seen, among many other indications, in foreign words such as *Šaγam* 'Šām, i.e. Syria'. As a circular corollary to their assumption of general coda syncopation, Johanson[100] and Róna-Tas think that 'retained' coda vowels (such as in *kara* 'black') must have been long; there is no evidence for this claim either.

Vowels (again not only /X/) appear to have gotten reduced by adjacency to certain consonants. Spellings like *t(ä)lgäk* (M III nr. 4 v15), *b(ä)lgülüg* (M III nr. 4 r9) or *k(ä)l-* (DreiPrinz 25, 26, 28 and 29) in early texts should probably be understood to show that /l/ could 'swallow up' the vowel, getting syllabic itself. The /l/ no doubt helped in the reductions of *näglük* from *nä+(A)gU+lXk* in TT X 265,[101] *aglïk* 'treasure house, storehouse' from *agï+lïk* in KP 7,5 and 8 and *orla-* < *orï+la-*. Some other such phenomena are discussed in section 2.403.

The question of the quality of the vowels participating in the archphoneme /X/ is a vexed one. In the vast majority of instances in non-Indic alphabets they are spelled with Y, W or WY (or the runiform character signalling a front rounded vowel) and not with '. In section

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[99] Anatolian Turkic *äränlär* may show that *äränn* was, when left as the only plural form ending in *+(A)n*, taken to be a singular; see p.158 for this suffix. A related process is connected with Turkic *süt* 'milk', which, by back-formation, became *sün* in Mongolic – because *süt* was felt to contain the Mongolic plural suffix.

[100] View expressed already in Johanson 1976: 145 quoting Ramstedt, Poppe and Clauson.

[101] I take the rather common *nälük* to be a further contraction from this form.

2.402 we show that /ï/ is lowered when adjacent to /r l/ and especially /g/, so that it does come to be spelled with characters indicating a low back unrounded vowel, and this in all stages of Old Turkic and in texts of all spelling and cultural traditions. This is a clear conditioned lowering of one vowel, which may be participating in /X/, in /I/ or may not be assignable to any of the two. In section 2.1 I pointed out that it was natural for /ï/ to sometimes be spelled like /a/ even when not lowered: Y traditionally denotes /i/, and /ï/ is unrounded and back-vowelled like /a/ though it also is unrounded and high like /i/. This only happens in early texts, mostly but not necessarily Manichæan. These two points are not sufficient for explaining all the facts, however, as there also are Manichæan instances where /i/ is also spelled with *alef*. Adjacency to /g r l/ does not predominate here, so that combinatory lowering cannot be the explanation: Doerfer 1993: 121-125 lists[102] *elig+(i)mäz* (M I 8,11, TeilBuch), *ämgäk+(ä)mäzin* (M I 11,19, TeilBuch), *käl-tämäz* and (M I 10,12, TeilBuch) *išlä-dämäz* (M I 11,14, TeilBuch) with *+(X)mXz*, *bägädmäk+äŋiz(i)n* (DreiPrinz 66), *ärmäk+äŋäzl[är* (M III nr.27 r14) and *iš+äŋäz(i)n* (M I 11,19, TeilBuch) with *+(X)ŋXz*, *elig+äg* (DreiPrinz 94) and *tämir+äg* (M I 8,12, TeilBuch) with *+(X)g*, *yüz+üŋüzän* (M I 10,9, TeilBuch) with the accusative ending after possessive suffixes, *kiši+näŋ* (M I 8,14 and 15, TeilBuch), *bäg+näŋ* and *yäklär+näŋ* (U IVA 152 and 168) with *+(n)Xŋ*, *tämir+än* (M I 8,11, TeilBuch), *ärklig+än* (TT VI 90 ms. L, beside three instances of *+in* in the sentence) and *t(ä)v+än* (M III nr.4 r11) with *+(X)n*, *ig+säz* (ChristManManus Manichæan fragment r9) with *+sXz*, *s(ä)v-äg* (M III nr.4 r5)[103] with *-(X)g*, *il-än-mägäy* (M I 15,5, TeilBuch) with *-(X)n-*, *är-äŋlär* (M III nr.4 r7) and *ämgät-äŋ* (TT II A 51) with *-(X)ŋ*, *kir-äp* (ChristManManus Manichæan fragment v6) and *tirl-äp* (M I 15,9, TeilBuch) with *-(X)p*. Interestingly, the lowering of /i/, common in one or two Manichæan texts but rare otherwise, seems to take place only when the /i/ is part of the archphoneme /X/. It would appear, then, that at least the unrounded members of /X/ may, in some archaic variants of Old Turkic (with a few remnants in texts of the standard stage) not have been phonetically identical to the members of /I/ and /U/ but lower. The graphematic hypothesis for the spelling of /ï/ may also be unnecessary. This by no means signifies, however, that any /X/ vowels were shorter than vowels of other archphonemes.

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[102] The genitive forms he writes as *+äŋ* have not be taken over here as they can, if written in Uygur script, also be read as *+n(i)ŋ*.

[103] What precedes this should have been read as *kïz agar* 'precious and honoured' and not as read by the editor.

2.3. *The consonants*

The consonant system for early Old Turkic, not including sounds found only in loan words, is the following:

	unvoiced orals	voiced orals	nasals	sibilants		liquids
labials	p	v	m			
alveolars	t	d	n	s	z	l
palatals	č	y	ñ	š		
velars	k	g	ŋ			r

The difference between the first and the second column of consonants must have been one both of voice and of tension, i.e. strong (more energetic, *fortis*) vs. weak (less energetic, *lenis*) pronunciation; the two distinctions must have been joined to varying degrees. The term 'stop' applies to /p t k/ but not to /č/, which is an affricate. It does not apply to the voiced orals, whose main variants are fricative: We could have written /d/ as /δ/ but found it more convenient here — following the practice of most work on Old Turkic — not to use Greek letters either in transcription or in transliteration. /d/ was realised as a stop [d] only when it was preceded by one of the voiced continuants /r l n/ or (in some cases) /z/. There is a [b] at the word onset; within words, [b] appears only in late texts: Onset [b] could be equally assigned to /v/ as to /p/. We use the letters *b* (in onset position) and *v* (elsewhere), *d* and *g* to transcribe the voiced oral consonants in all positions. Among the velars, fricativity was not characteristic of the voiced member of the opposition but rather of the voiced and partly also the unvoiced allophones obtaining in back-harmonic syllables.

The nasality opposition is fullest for the alveolar domain. It is weakest among the palatals, since the opposition /y : ñ/ is cancelled for the great majority of sources not written in runiform script. The opposition between oral labials and /m/ is cancelled for most of Old Turkic when an onset [b] is (after a vowel) followed by a nasal, as [b] is then replaced by /m/. In marginal sources we also sometimes witness a /v ~ m/ alternation between vowels, as in the DLT's *küvürkän* / *kümürkän* 'wild onion'. A /g ~ ŋ/ alternation is found in verbs such as *äg-* ~ *äŋ-* 'to bend'; suffixes containing /ŋ/, e.g. the 2nd person possessive suffixes, are often (especially in inscriptional Turkic) found with /g/ instead of the nasal.

/s/ and /z/, the unvoiced and the voiced alveolar sibilants, are put into one column for convenience. The placing of /r/ among the velars is arbitrary; we do not know how this phoneme was pronounced.

2.31. The labials

In referring to runiform texts, scholars have often assumed that the voiced labial consonant in inscriptional Turkic is [b] wherever it appears, also between vowels. They give '*äb*' ‚house, home', for instance, where I write *äv* also when transcribing runiform texts, or '*yabïz*' and not *yavïz* for 'bad'. It was V. Thomsen who chose this rendering, presumably in view of the principle that the runiform characters b^1 and b^2 should be transcribed the same way wherever they appear; he was followed e.g. by Tekin 1968: 7. I find myself in agreement with Clauson 1962: 77 and Zieme 1969: 36 in this matter. Since there is no runiform character for [v][104] (or for [f]), there is no solid basis for Thomsen's assumption, as the users of the alphabet had no choice but to use the *b* letters; nor was any additional letter needed for any relevant phonemic distinction. Unless proven otherwise, I therefore take the realisation of this phoneme in runiform sources (*some* of which were, after all, not older than some mss. written in Uygur script) not to differ from that of other Turkic languages retaining the labial in such words (especially not from Old Uygur). A number of scholars have taken the realisation as *b* (even between vowels) to be one of the characteristics of the oldest (Orkhon Turkic) stage of Old Turkic, and then assumed a passage *b* > *v* in the transition to the second oldest stage; this characterisation of the earliest Old Turkic is, I think, fictitious. The fact that the runiform script is unable to distinguish between a stop and a fricative cannot be a reason for assuming that there was only one realisation each of b^1 and b^2.

The non-plosive main allophone of the weak voiced consonant could in principle have been a labio-dental ([v], voiced counterpart of [f]), a bilabial fricative continuant ([β], the voiced counterpart of [φ], the blowing sound) or a bilabial flap ([w]). [w] appears not to have been

[104] This might speak for a Semitic origin for the script, as no early Semitic languages or writing systems possessed a *v* as distinct from *b*, though they did possess a *w* (which could also serve as *mater lectionis* for rounded vowels). Semitic scripts in use for writing Old Turkic do use W when rendering the consonant [w] in borrowings and the like (see below). The Indic Devanāgarī script also only has two and not three characters to represent the labial oral consonants.

meant when the Uygurs used the letter *beth* for writing it both in the Uygur and in the Manichæan script:[105]

wāw is in fact also used as consonant – rarely and only in foreign words; e.g. *waxšig* 'dæmon' e.g. in ManUigFrag r1 (Manichæan) or TT V B 124 (Buddhist), *widvag* 'chapter' (SP 30 and two other places[106] mentioned in the note thereto), *tawčaŋ* 'sedan chair' e.g. in HTs VII 1111, *lenxwa* 'lotus', *narwan* 'elm' (ManUigFrag r4) or the divinity name *äzrwa*. Such spelling is quite consistent, indicating that words were probably actually pronounced with a bilabial voiced consonant at least by some individuals. Runiform O / U is also used in this way: Cf. *kew(a)n* 'Saturn' in BlattRun 10 and cf. the remark on this on p. 298 of the edition (p.607 of the reedition). Note that this /w/ could appear both at the onset and coda of syllables. The interjection *awu* also has the sound [w], but interjections often contain sounds not otherwise used.

The DLT distinguishes (fol.26) between consonantal *wāw* and thrice-dotted *fā*, which is said to have been pronounced "between the points of articulation" of *fā* and *bā*; the Oguz are said to pronounce *wāw* where the other Turks have the three-dot *fā*. Dankoff & Kelly p.55, who discuss the instances where this is defined and used, take the three-dot *fā* to refer to a bilabial which they transcribe as *w*, while they take the letter *wāw* to refer to a labiodental voiced consonant, [v]. They base their argument on the fact that the Oguz and the Persians nowadays pronounce the sound as [v]; therefore, they think, this must also have been what Kāšġarī meant with *wāw*. Borovkova 1966 (supported by Doerfer 1993: 52) had held the opposite opinion, taking *wāw* to have have been used with the sound value which it has in normal Arabic. My use of the letter *v* to refer to this phoneme also when quoting the DLT should not be understood as implying a choice for one of the three possible pronunciations mentioned above. *u:* 'sleep' is spelled as *uv* once in U III; *uvšat-, uvšan-* and *uvšal-* 'to crumble (tr. and intr.)' and *uvšak* 'petty' are, on the other hand, often spelled without *v* (with *ugak* 'mortar' from the same root), and *kuvrat-* 'to assemble (tr.)' is sometimes spelled as *kurat-*. Cf. *su* < *suv* 'water' in DhāSū 36. This would speak for a bilabial pronunciation of /v/ at least after /u/. The

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[105] Gabain used the letter *w* for [v], following German orthography, and the letter *v* for [w] in her publications, including her text editions and grammar (1941, 1974). Hamilton uses *β* in his transliterations of the oral weak labial.

[106] One of these has now been shown by Zieme to be a Vimalakīrtinirdeśa fragment and not Manichæan, as Maue & Röhrborn thought. Zieme 2003a: 147 proposes *yör]üg widvag* but *böl]ök widvag* would be better: *widvag* here (as elsewhere in Uygur) does not signify 'interpretation, explanation', the primary meaning in the source language Sogdian, but 'chapter', the second meaning it has in Sogdian.

Manichæan and Uygur script use of *wāw* exclusively for transcribing [w] in foreign words clearly speaks for a labiodental pronunciation of normal Old Turkic /v/.

In the word onset [b] could, as an alternative to being an allophone of /v/, be assigned to the phoneme /p/; this would correct the system asymmetry following from the absence of [p] in this position in original Turkic words[107] though all the other unvoiced phonemes except /š/ do appear in onset position. Several modern (e.g. Siberian) Turkic languages have just this postulated /p/ in onset position (with sporadic appearance of *#p-* in some other Turkic languages, e.g. Turkish). Brāhmī mss. also use the letter *p* more often than *b* and *bh* for [b],[108] proving at least that the phonemic load on the distinction between these was not very important to the scribes. The fact that the Uygur script has Semitic and Sogdian *pe* for [b] supports this idea but is no automatic proof for it: Sogdian used Semitic *beth* (as well as *gimel*) to represent fricatives and not stops, and [b] is no fricative. The Manichæan writing system does use Semitic *beth* to render [b], using *beth* with two superscribed dots to write [v].[109] The [v : b] opposition seemed more worthy of explicit representation than the [p : b] opposition to those adapting the Sogdian alphabet to Old Turkic, but the [p : b] opposition was treated as the more essential one by the adapters of the Manichæan script to this language. The fact that the runiform script, which was in use both in Mongolia and in East Turkestan, used the two *b* runes after vowels for what appears as [v] in all Turkic languages and also for representing the labial stop in the onset of words strongly speaks against the possibility that the Old Turkic labial in this position was a [p].

Uygur /v/ appears to remain a fricative even after /r l/, as shown by instances of the suffix *-vI* (q.v. in OTWF section 3.115) and by such stems as *alvïr-* ‚to rave‘ (near-minimal pair with *alpïrka-* ‚to find

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[107] Uygur texts do have it there in numerous borrowings from Sanskrit, Chinese etc.; see section 2.404 for what cannot appear in the onset and for possible reasons.

[108] Cf. Róna-Tas 1991: 83: “Onset *b* is as a rule transcribed with *p-*. In the manuscripts F, H and I we find as a rule *bh-*. The manuscript K has in most cases *ph-*. The writing with *b-* is relatively rare, but occurs in the most frequent words such as *bilig, bilge, baš, beš.* The word *burxan* is always written with *b-*, and in the two manuscripts where we find also *p-* (A, E) it occurs together with forms written with *b-*.”

[109] These two dots are occasionally dropped, making [v] appear as *b*, e.g. in *suv* ‘water’ spelled as *sub,* or in the noun *kïv* in BT V 134. Three lines further, in BT V 137, the dots are there, however, making it likely that in this passage, as in texts in Manichæan script in general, the omission is merely graphic and is not to be understood as reflecting pronunciation.

something difficult'), *arvï* ‚doubt', *yelvi* ‚magic', etc. Instances of the realisation of /v/ as [b] beside /l/ are discussed in section 2.409.

The realisation of /p/ between vowels is not very clear. On the one hand we have two words in Indic scripts which show *b* between vowels: *koburga* 'owl' in TT VIII O4 and *abag* 'sheltered' from the stem *apï-*, in TT VIII I 4 and BuddhKat 20 (in both cases with lowering of the /ï/ due to the adjacent /g/). This labial must be an allophone of /p/, as the voiced oral labial would in this position be realised as [v].[110] On the other hand we have *tupulgak* / *topolgak* 'cyperus' attested with *p* in Brāhmī script (TT VIII M29 and ms. Mz 202 r1). Concerning Old Turkic *töpö* 'hill', *tapa* 'towards', *tapïn-* 'to worship', *tap-ïg* 'service', *topol-* 'to pierce', *kapar-* 'to swell up, form a blister', *kapag* / *kapïg* 'gate', *kopuz* 'stringed instrument', *köpik* / *köpük* 'foam', *sipir-* 'to sweep', *yïpar* 'musk' or the DLT's *tüpi* 'a high wind', *sapan* 'a plough', *tapan* 'the sole of the foot or a boot' or *čïpïk* 'a stick' no evidence is known to me of a pronunciation with [b].[111]

[f] is an allophone of both /p/ and /v/ appearing before /š/: *yafšur-* < *yap-ïš-ur-* 'to stick or fasten something onto something else', e.g., is spelled with F in Pothi 127; this text is in Manichæan writing, which has a special character for [f].[112] The form spelled as *yavšuru* (< *yap-ïš-*) in ShōAgon 1,365 has the same meaning; using Semitic B (which signals a voiced labial fricative in Uygur as in Sogdian), the scribe might actually have meant [f]. He may, however, also really have been thinking of [v]: Kāšġarī (fol.485) states that the verb has the shape *yapčur-* but that there is a variant which he spells with WJ instead of BJ adding that this is pronounced with *fā'*. Dankoff & Kelly think that what he means is [w] because they believe Kāšġarī pronounced *wāw* the Persian way, as [v]. They may be wrong, as [f] and [v] share the feature of labiodental articulation as against *kapšur-* (not '*kabšur-*', as transcribed), appearing in BT III 935 beside *kavšur-* elsewhere in that text. *tapšur-* 'to hand over' is also likely to have been pronounced as *tafšur-*, but *tapčur-* in DLT fol. 354 shows that the Qarakhanid dialect did not participate in such a development; in that source we also find

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[110] *koburga* could be read with *p* in DLT fol. 245, where Dankoff & Kelly write *b*; Kāšġarī uses *bā'* also to represent the sound [p]. See OTWF for Uygur instances of *apï-* and *apït-* not mentioned in the EDPT or the UW. The latter writes *abıg* and *abıtılmaksız* with *b*, which is justified by the Brāhmī spelling, while *apï-* etc. is phonemic.

[111] If Turkish has *kabar-, saban* and *çubuk* this is because these words had long vowels in their first syllables in Proto-Turkic and Proto-Oguz.

[112] Note, though, that the verb *ävir-* is also spelled with F in TT IX 117, also in Manichæan writing.

the variant *kikčür-* < *kikšür-*. p > f and k > x, which both take place before /š/, are attested only in back-harmony syllables. The runiform, Uygur, Brāhmī and Tibetan scripts have no character for [f].

[f] is otherwise found in borrowings; a very well attested one is *frišti* ‚angel' spelled with *v* (Semitic B) e.g. in ManUigFrag r3. The note to BT V 241, where *frišti* is also attested, lists the four ways in which the first sound of this word is spelled in Uygur writing: either with B (one example beside the one just mentioned) or with P with a pair of dots over or under the letter or (most commonly) with a line under the letter P. The word spelled as *Porom* in KT E 4 and BQ E 5 in fact represents *Forom,* coming from *From*, the Parthian form of the name of (East) Rome or Byzantium. In runiform mss. it is the characters b^1 and b^2 (also used for writing /v/) rather than p (as in the inscriptions) that are used for rendering [f].

We had, in the table, given /p/ and /v/ as unvoiced and voiced oral labial consonants respectively. With the addition of foreign words we get /p/ and /w/ as unvoiced and voiced oral bilabial consonants (/m/ presumably also being bilabial and voiced) and /f/ and /v/ as unvoiced and voiced oral labiodentals respectively.

2.32. The alveolars

It is clear that Old Turkic had a /t/; the question is whether the voiced counterpart of this was /δ/ and not /d/ in the whole of Old Turkic. The Proto-Turkic voiced alveolar *might* have been /d/, seeing that this is what appears in Sayan Turkic, and that the Proto-Turkic phoneme fused with /t/ in Yakut. A change **δ > d* is, however, possible even between vowels under substrate or adstrate influence, and the Yakut development is secondary in any case. Evidence will be presented below for the thesis that the main allophone of the voiced alveolar consonant was [δ] and not [d] in all Old Turkic including Orkhon Turkic (against the view of T. Tekin and some others). The runiform and the Uygur and Sogdian scripts have two characters to represent the non-nasal alveolars, the phonemes referred to above as /t/ and /δ/; the Semitic scripts use the Semitic *tau* or *teth* character for the former and *lamed* for the latter. Semitic *daleth* is not used at all in Sogdian and Uygur writing and is in Manichæan script used only after *n*. The runiform script has, in addition, two ligatures, one to express an /l/ followed by an alveolar, the other an /n/ followed by an alveolar. The Qarakhanid authors writing in Arabic script had at their disposal three letters (here disregarding the glottalised consonant characters) to

represent non-nasal alveolars, *tā*, *dāl* and *δāl*. These three letters can be said to reflect a differentiation along two trait distinctions: *tā* is voiceless or strong while *dāl* and *δāl* are voiced or weak; alternately, *tā* and *dāl* are stops while *δāl* is a continuant. Dealing with the distinction which the DLT makes between *dāl* and *δāl*, Dankoff & Kelly 1982: 55-56 find that there is a lot of fluctuation between the two; cf. examples such as 10 times *boδun* vs. 17 times *bodun* in their footn. 80. The reason for this can very well be graphic, as the graphic difference consists of a superscribed dot; such diacritics of the Arabic writing system notoriously get lost in the mss. whatever the language.[113] Note, on the other hand, that there are e.g. nearly 50 instances of *aδak* and not a single *adak* in the DLT. The QB mss. sometimes differ among themselves in this respect, B e.g. often writing *kaδaš* where C has *kadaš*. As Dankoff & Kelly 1982: 55 note, Kāšġarī explicitly mentions a d ~ δ alternation in connection with two words and in at least three places in the Dīvān has separate subheadings for the two letters; he also states that those dialects which change <u>*d*</u> to *y* also change *d* to *y*. All these bits of information do not prove that there were two distinct voiced oral alveolar *phonemes*. Most authorities describing Old Turkic spoke of *d* and not of *δ*. I think the main allophone of the single voiced non-nasal alveolar was /δ/; I agree in this with Johanson 1979 and Sims-Williams 1981, scholars of quite different background and outlook who reached this opinion independently.[114] Sims-Williams' arguments are based mainly on the fact that *lamed* never denoted a stop in Sogdian, the language from which the Uygurs got their main alphabet. The main point in Johanson's thought is that suffixes like +*dA* (locative), -*dAčI* (future participle) or -*dXm* etc. (past tense), which normally have the *d* runes, write these suffixes with the *t* runes when they are preceded by /r l n/ and rarely /z/ (unless, in the case of *l* or *n*, there is a ligature). Variants of suffixes starting with the voiced alveolar are dealt with singly in the morphology chapter of this book; it turns out that different suffixes behave differently, some of them showing the stop allophone only after /l n/ and some after /r/ and even (rarely) /z/ as well. Johanson states that the *t* runes in these cases do not represent a different phoneme but the stop (i.e. [d]) allophone of /δ/. Other

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[113] The authors consider two other possibilities: "2) the phoneme was between [d] and [<u>d</u>], and Kāšġarī uses D and <u>D</u> interchangeably to indicate it ...; 3) the wavering reflects dialect mixture."

[114] Sims-Williams (1981: 354), unaware of Johanson 1979, writes: „Further arguments could be adduced, but I hope that those already mentioned will be sufficient to indicate the desirability of a reconsideration of the whole question by a competent Turcologist."

languages where the main allophone of the voiced oral alveolar is a fricative, like Greek and Spanish, do the same when this phoneme appears after /n/. The ligatures are, accordingly, to be read neither as '[nt, lt]' nor as '[nδ, lδ]' but as [nd, ld]. See section 2.409 below for further discussion of the phonotactic aspects of this matter. The evidence for these sounds to be gleaned from Brāhmī mss. has been discussed most authoritatively (and based on the widest evidence) by Maue 1983. Brāhmī sources also appear to distinguish between these three alveolar sounds, using the letters or letter sequences *tt* or *td, t, dh, d* and a special additional character serving in some manuscripts in the same way as *dh* serves in the others. *tt* and *td* clearly represent [t], *t* is [t] or [d], and *dh* or the special character represent [d] or [δ]. The letter *d*, which is only used in the ligature *nd,* is not relevant if, as Maue 1983: 55 n.11 thinks, it was preferred over *nt* because *nt* looked so similar to *tt*. Relevance does become evident, however, if one remembers that the Manichæan script uses *daleth* only after *nun*, and that one of the three sonant + consonant characters of the runiform script links the alveolar with /n/. The alternative view (which we find e.g. in Tekin 1968) takes runiform writing at face value, stating that the opposition between /d/ and /t/ is neutralised after /r l n/ in favor of /t/: This is, it is there said, what happens in Chuvash, where Proto-Turkic /d/ coalesced with /r/ everywhere except after /r l n/, in which position it becomes /t/. The fact is, however, that Chuvash /t/ is, in this position as between vowels, pronounced as a weak stop. This is also what might have happened at some stage in Old Uygur: If /t/ acquired a voiced allophone in certain positions, the [d] allophone of /δ/ might, e.g. at the stage when the mss. begin to use the *t* and *d* characters interchangably, have joined the phoneme /t/. T.Tekin 1968: 7 takes the stop pronunciation of *adak* 'foot' or *tod-* 'to be satiated' to be characteristic of Orkhon Turkic, assuming these to have become *aδak* and *toδ-* respectively in subsequent stages of the language. This assumption need not be made for Orkhon Turkic, as the script did not have the possibility of distinguishing between the two alveolars (as it was also unable to distinguish between [b] and [v] and between [g] and [γ]). The suffixes *+dA*, *-dOk* etc. have to be distinguished from suffixes like *-tUr-,* which originally started with /t/ and show T in all positions in Orkhon Turkic; when they appear with D in late Uygur, this is the result of voicing assimilation coming up at that stage.[115]

[115] The remaining problem is why *+dA, +dAn, -dAčI, -dOk, -dI* etc. surface with /d/ and not /y/ in all those Middle and Modern Turkic languages which turned all [δ] to /y/ within and at the end of stems although [δ] is supposed to be their main allophone. The

2.33. The palatals

Old Turkic /y/ is a consonant and not a semivowel alternant of /i/: When a stem ends in /y/, a 3rd person possessive suffix following it starts without onset /s/, and if a suffix (e.g. *-(X)t-* or *-(A)lIm*) starting with a vowel follows it, the vowel is not dropped. Vowels + /y/ give diphthongs neither in originally Turkic nor in borrowed elements.[116]

/y/ is not the direct voiced counterpart of /č/, which is an affricate starting with [t] whereas the former is a fricative. Proto-Turkic onset /y/ does, however, appear as the voiced affricate [ǰ] in a number of Turkic languages including Volga Bolgarian, and also in cognates in Mongolic (which itself does have onset /y/ beside onset /ǰ/ in original Mongolic words with no Turkic counterparts).[117] Whether Old Turkic speakers also pronounced the affricate [ǰ] (the voiced counterpart of /č/) in any context is unknown; this may have been the case e.g. with *važïr* 'vajra', which is often also spelled with C: [ǰ] may for some have been less unpronounceable than [ž]. We do not know exactly how /č/ was pronounced. The sequence /ts/ appears to have become /č/ in *süči-* 'to be sweet and pleasant' (Qarakhanid) and *süčig* 'sweet' (found already in Orkhon Turkic; late meaning 'sweet wine'), since they probably come from **süt+si-* 'to be like milk'.[118] In TT IX 24 /č/ is, Manichæan writing, spelled with the letter Z.

čalïnlïg appears as variant of *yalïn+lïg* 'brilliant' in completely fragmented context, followed by a lacuna, in BT XIII 5,188 and also, in the binome *čalïnlïg čoglug*, in ShōAv XIIa9. This spelling may be the result of reborrowing from Mongolian, where *yalïn* appears as *jali(n)*, and/or *čoglug* (which may possibly have stood in the lacuna also in BT XIII) may have had some alliterative influence. Zieme invokes the appearance of *č°* for Old Turkic (and Oguz etc.) *y°* in some modern

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answer given by Johanson 1979: 52, that a locative suffix *'+yA'* would get confused with the dative is not convincing because 1) the dative has this shape in quite a small part of the Turkic world, 2) no similar explanation holds for any of the other suffixes mentioned, and 3) case suffixes *have* been known to disappear because of diachronic sound laws. Rather, at some stage, presumably already in varieties of Old Turkic, [d] was generalised at the onset of syllables or at least suffixes.

[116] Editors nowadays adapt the spelling of borrowed words to what is known about Old Turkic phonotactics. Only *maytri*, the Uygur name of the future Buddha Maitreya, is still transcribed 'traditionally', as *"maitri"*.

[117] It is not clear on what base Johanson 2001: 1723b assumes the existence of /ǰ/ in "Ost-Alttürkisch" (as he calls the language).

[118] This is made likely in OTWF 204 and 534; cf. Persian *šīrīn* ,sweet' < *šīr* ,milk' and the fact that Turkmen *süyt* and *süyji* both have long vowels.

languages, but this word by itself is not enough for assuming that there was such a dialect also among the users of Old Turkic texts.

/ñ/ could have been either a palatalised nasal as in Dolgan or a nasalised [y] as in Yakut (both Lena Turkic languages); it is retained also in Tofa. Our evidence for this phoneme is rather scanty: Among the original stock we can discern, perhaps, one suffix, one pronoun, eight nouns and adjectives, three verb stems, the proper name *Tuñukok* and the ethnic name *Kïtañ*. A character for this sound exists only in the runiform script; the palatal nasal of the Indic writing systems is not used for representing it. Runiform sources (listed in Clauson 1962: 91) have /ñ/ (beside proper names) in the diminutive suffix *+kIñA* and in the stems *añïg* 'bad', *čïgañ* 'destitute', *turña* 'crane',[119] *kañu* 'which', *koñ* 'sheep' (also in *koñčï*) and *yañ-* 'to disperse'. A Turfan fragment (MIK III 34b = T II T 20 in KöktüTurf, p. 535 in SEddTF) listing runiform characters together with their pronunciation in Manichæan script gives 'YY (to be read *iy* or *ïy*) for the runiform character *ñ*. This could signal a transitional stage, in which this character was still known and could still be used when writing in runiform script, though its pronunciation had changed. Therefore, if we find a word spelled with runiform *ñ*, this in itself does not guarantee nasal pronunciation, and the convergence of /ñ/ with /y/ *may* partly have taken place earlier than assumed hitherto. Alternatively, the author of this fragment may have felt *y* to be the representation closest to the nasalised voiced palatal consonant he knew; this is what I would do if it sounded as it does in modern Yakut.

In Old Turkic written with other alphabets, */ñ/ in most texts becomes *y*. *turña* 'crane', e.g., appears as *turya* in TT VIII P 29; Zieme's correct interpretation of this is quoted in Maue 2002: 83 (footn. 43). There are, however, conspicuous exceptions: A few Manichæan mss. have the digraph NY also in Semitic writing systems. We find it in *bir+kinyä* 'single' (M I 23,32) and in *kanyu* in Wettkampf 43, six times in the London scroll of TT VI (according to Laut 1986: 81), PañcFrag 192 and ManTürkFrag 7, with an additional 10 examples for *kanyu* mentioned in the note to this latter instance. Two of these examples appear in a Buddhist fragment quoted in the n. to TT V A 23, showing that the retention of /ñ/ was not limited to Manichæan sources (as

[119] I do not think the spelling with ÑY in the IrkB indicates a pronunciation placing Ñ and Y into separate syllables: There are in that text many instances of a double sign being redundantly accompanied by a simple one, e.g. *Türk* getting spelled with the character for rounded front vowels followed by ^{w}k. *turñya* is probably just to be read as *turña* (or possibly as *turuña* in view of some modern forms).

generally thought).[120] The spelling ’NYΓ for ‘evil’ in Manichæan script in the X^{w}āstvānīft, 21 times in Uygur script in the TT VI London scroll (again according to Laut) and no doubt elsewhere as well can be read either as *anïg* or as *añ(ï)g*, depending on whether one believes that /ñ/ lived on unchanged in this text or that it became /n/. In mss. in Uygur writing, this may also be a misreading of *a(y)ïg*, when the editor assumes defective spelling of *a* with a single *alef*, since N and *alef* mostly look the same in that script (see also the UW entry *ayïg*). We encounter similar problems with *köñ-* ‘to burn (intr.)’, the other verb ending in /ñ/, whose *-Ur-* derivate seems to be attested with NY, YN, Y or N in Manichæan sources (see OTWF). The only example which may *have* to be read as *anïg* because there is a superfluous *alef* after the N appears in Fedakâr 549 (Sogdian script) in very fragmentary context; the Y is also damaged. *künäš* ‘a sunny place’ in IrqB 57 is an exception, explained through contamination with *kün* ‘sun’: This runiform ms. otherwise consistently retains /ñ/, in *koñ*, *añïg*, *turña* and *čïgañ*.[121]

koyn ‘sheep’ is another exception, consistently spelled thus in most Uygur sources. Some examples are listed by Doerfer 1993: 129,[122] who considers this to be mostly an archaism for what was already pronounced as /y/. In view of the five cases[123] where this word is spelled in Brāhmī writing as it is spelled in Uygur scripts, I do not think its pronunciation as a single syllable containing a nasal stretch or feature can be doubted. *koy* is normal in Qarakhanid but is rare even in late Uygur.

ñ > *yn* is otherwise characteristic of Oguz, e.g. in *boynuz* ‚horn‘,[124] and *doynak* ‘horse’s hoof’ < **toñok*. We can add the DLT’s evidence on Oguz *baynak* ‘dung’, which corresponds to *mayak* in Uygur and Qarakhanid. At the end of stems, *yn* is in Oguz realised as *yXn*, e.g.

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[120] *kanyuda* has also been read in U II 6,13, also Buddhist, but the ms. is now lost.

[121] Uygur otherwise has *kuyaš* < **kuñaš*, which lives on as *kuña:s* ‘warm weather’ in Yakut and Dolgan. The IrqB form conforms with Khaladj *künäš* / *kinäš* ‘sunny’ and Oguz *günäš* (Turkmen ‘sunny, sunlight, sunny place’).

[122] *koyïn* in BuddhKat 20 is not the nominative, as he thinks, but the accusative form of stem + possessive suffix; the passage reads *atïn, adgïrïn, koyïn yïlkïsïn ... ïdalayur*. This rather early source has progressive *-sA* instead of the conditional suffix *-sAr*, and *koy* ‘sheep’ could be another progressive feature; but then, [ñ] could also have been a too difficult a task to tackle in the Tibetan transcription.

[123] In TT VIII P, reedited together with an additional fragment in Maue 2002. The 1st person singular modal suffix is also practically always spelled with final YN.

[124] It follows from the Brāhmī spelling in Maue 1996 nr. 44 b B 8 that Uygur *muyuz* had back vowels (and not front ones as written in the EDPT); spellings in Uygur writing are ambiguous.

koyun ‚sheep‘, Ottoman *göyün-* < *köñ-* ‘to burn’, *beyin* ‘brain’ < **bäñi* (coda vowel presumably metanalysed as possessive suffix).

Kāšġarī mentions it as a characteristic of the dialect of the Argu that they changed /y/ to /n/ in the words *kanak* ‘the skin on milk, cream on the top of milk’, *kanu* ‘which’, *kon* ‘sheep’ and *kön-* ‘to burn’. The last three are attested in Old Turkic with /ñ/, while the first one is found in this shape in Yakut. The Argu dialect, then, is one which Kāšġarī knew to have changed /*ñ/ to /n/. This is also what happened among the ancestors of the Khaladj, whose dialect has *n* where Proto-Turkic had **ñ*.[125] The shape of **yuñ* ‘peacock’ follows form Uygur *yuy* (twice Suv and twice Pañcarakṣa) and the DLT’s (twice) *yun*.[126] Above, we had seen that *turña* ‘crane’ became *turya* in Uygur, as still today in Tuvan; in Qarakhanid this bird name as well became *turna* (DLT fol.550 and QB 74 and 5377), as in Oguz, Kipchak and South-Eastern Turkic.

The diminutive suffix *+kIñA* became *+kIyA* (spelled as *+kyA*) in most of Old Uygur. It has been assumed since Gabain’s first treatment of the dialect question that the passage ñ > n had taken place in some Uygur sources as well, but this hardly seems to be the case. She bases her idea among other things on two TT I words which she read as containing the diminutive suffix *+kInA*, but these subsequently turned out to be misreadings of *+kI+čA*. *azkïna* ‘quite little’ appears with /n/ in two Uygur (U 139 v5 in the note to BT V 175 in Manichæan script, and KP 7,6) instances, but the UW quotes dozens of others which have /y/. There also are two QB instances of *azkïna* (3964 and 5440 in all three mss.) and cf. *azrakkïna* in QB 6633 in both mss.. The scribe in DLT fol.601 seems to have done the appropriate thing when, in a quatrain rhyming *sözkiyä*, *tuzkïya* and *közkiyä* he adds dots for *nūn* on the first and third word without crossing out the dots for *yā’*; all dots seem to be by the first hand. The */ñ/ in this suffix appears to have an exceptional history in any case, as it turns up as *+kInA* in Middle and Modern Kipchak and in South Eastern Turkic, whereas other original /ñ/s appear as /y/ in those branches of Turkic.[127] If *+kIñA* had become *+kIyA* among the ancestors of the speakers of Middle or Modern Kipchak languages

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[125] Doerfer considers this language to be new Argu, as it were, but material in Sims Williams 2000 shows that Turkic Khaladj lived as a nation in Northern Afghanistan already before the appearance of the Argu in the sources.

[126] Cf. Zieme 1969: 226 for a probable Mongolian cognate. Dankoff & Kelly read the DLT word as *yün* and are followed by Hauenschild 2003: 249-250. The EDPT (entry *yo:n*) is wrong in stating that “there is no native Turkish word for ‘peacock’”.

[127] Another exception is *tur(u)ña* ‘crane’, mentioned above; contiguity with /r/ may there be the reason.

or Uzbek or Uygur, they could not have reversed the process; there must have been one or more influential but now obsolete dialect where this suffix was retained with some sort of nasal.

Secondary /ny/, the sequence of two phonemes, also got simplified to /y/ in Qarakhanid, as shown by the shape of *-yOk* derivates of bases ending in /n/: *ögräyök* 'custom' from *ögrän-, bulgayok* 'confused' from *bulgan-, osayok* from *osan-* and *sarkïyok* from *sarkïn-*; verbs of the shape '*ögrä-*', '*osa-*' and '*sarkï-*' are not attested and *bulganyok* is lexicalised already in Uygur. If the DLT's *kayak* and Argu *kanak* (Middle and Modern Turkic *kaymak* except *kanak* in Khaladj) go back to *kayna-* 'to boil' and the base of *kayïntur-* as suggested in Doerfer 1993: 130, then the source of the *n* ~ *y* alternation should, in this word, also not come from /ñ/ but from the phoneme sequence /yn/ or even /ym/.

One piece of evidence for original *ñ as second consonant are those cases where there is, in an originally Turkic word, /m/ at the beginning of a word without there being a nasal following it. Such cases are Uygur *moyum* 'confused', *muyuz* 'horn', *mayak* 'dung', the DLT's *mayïl* 'overripe' and its cognates, *muyga* 'headstrong' and *muygak* 'female maral deer'. Uygur *meji* 'brain' corresponds to *meŋi* in the DLT, *mäŋä* in the QB, both attested solidly; I do not think that this should make us posit '*ŋ́' as an additional phoneme for Proto-Turkic, as is believed by some: Note that **buñuz* also became *müŋüz* or *muŋuz* in the latest Uygur and in the DLT, but cf. Chuvash *mă̆yraka* (with diminutive suffix). The b > m change thus gives us an indication for the original state of affairs in stems starting with labials. The number of */ñ/s which we do not know about because the stem started with /t/, /č/, /k/ or vowel, not being attested in the earliest texts or in Khaladj must, taken together, have been much greater. In a Yenisey inscription we find *tañ+larïm* 'my colts'. This noun is otherwise attested in the DLT and the QB, in Middle and Modern Turkic but not in Uygur; generally it has the shape *tay* and Yakut has *tïy*. Had it not been for this one inscription, we would not have known of the possibility that the word may have had a palatal nasal; this is a matter of coincidence. In view of the state the Yenisey inscriptions are in, the Ñ may also be error.

To sum all this up from the dialectological point of view, post-inscriptional Turkic had varieties in which /ñ/ was in some form or other retained as an independent phoneme; elsewhere it became /yn/ or fused with the phonemes /n/ or /y/. ñ > n is attested in Argu and Khaladj, for two nouns in Qarakhanid; *+kIñA* had a special development. In Uygur /ñ/ was gradually reduced to /y/ with

fluctuations, but there was no *n* dialect within Uygur. Wherever scholars have found an N for *ñ in Uygur, there practically always is a Y beside it, again giving /ñ/; assuming defective spelling (which is common in all texts and especially in the ones in question) the (in any case rather rare) instances for N can all, with one exception in Sogdian writing, be read as NY or YN. Clauson 1962: 118 had proposed that these NY, YN and N are all spellings for *ñ*. Röhrborn 1981-82 accepted this view and further proposed that the Y < ñ appearing in these texts should be read as [ñ] as well: I think the opposite is true: NY was, at any rate in mss. in Manichæan and Uygur script, an archaic and obsolete spelling for what was presumably already being pronounced as [y] by most of the population. This could partly have been true even for the runiform mss., even if they consistently wrote Ñ.

2.34. The velars and */h/

The pronunciation of /k/ is likely to have been rather different in back-vowel and front-vowel surroundings, at that time as in most modern Turkic languages: All the writing systems of Semitic origin, all varieties of the runiform script as well as Old Turkic texts in the Northern Brāhmī used different letters to render these two. In the latter there are two traditions for rendering the guttural consonants, as shown by Maue 1985, both involving three signs: In one tradition, voiced and unvoiced are distinguished in the back-vowel domain, while front /k/ and /front /g/ go undistinguished. This is clearly influenced by the system of the Uygur script, where *gimel* and *ḥeth* represent back-vowel /g/ and /k/ respectively in pre-classical Uygur texts, double-dotted *gimel-ḥeth* assuming the task of [q] in Classical Uygur, whereas no voice distinction is made explicit among the front velars.[128] We have the same situation in the Qarakhanid system, where *ghain* and *qāf* are voiced and voiceless repectively, whereas *kāf* also serves for /g/ in the front domain. In the other Brāhmī tradition, which is closer to phonological reality, back and front /k/ are distinguished, but not back and front /g/. In Tibetan writing, [q] is generally (but not in BuddhKat) spelled as GR at the beginning of words and syllables though not at the end of syllables. The hippological bilingual in southern Brāhmī

[128] I know of only one text in Uygur writing which uses K and X indiscriminately: HamTouHou 16, a letter written by an ambassador from Khotan to China, who appears not to have been all too familiar with Uygur spelling; it shows other irregularities as well, e.g. *bešinč* 'fifth' written as PYŠYC.

(Wordlist) uses K both for front and back /k/, while BuddhKat often uses G for both at the onset of words.

Runiform Q rendered a fricative [x] especially in foreign words; e.g., in the Orkhon inscriptions, the proper name *Maxarač* and the city name *Buxaraq*. The title *kan* was probably also pronounced as *xan*; the opposition *kan* 'blood' vs. *xan* 'ruler' must be considered a minimal pair, insofar as vowel length was no longer distinctive.[129] *xan* may have been an early borrowing into Turkic from a language which died out without direct documentation, and is also the source of the second syllable of *burxan* 'Buddha'.[130] Since *xan* must have been within the Old Turkic lexicon for centuries, we are entitled to consider it to be part of the legitimate base for determining the phoneme inventory. [x] would have been considered a phoneme if there had been more distinctive load on the opposition, if it had not been an allophone of /k/ and perhaps a free alternant as well. The voiceless velar may sometimes have been pronounced as a fricative also in front harmony words: We find a word for 'breast-strap' spelled as *kömüldrüx* with H in Wordlist 21.

The realization of Sanskrit *h* in loans in Uygur texts in Uygur script is explored by Röhrborn 1988. As he shows, it was spelled as X before the vowels /a u o/; before the vowels /i e/, however, K was used to represent what had been Sanskrit *h*. The reason, probably, is that the sources of the Uygur *q* character are in fact the Semitic letters *gimel* and *ḥeth*, which were in Sogdian used to express the voiced and the unvoiced velar fricatives respectively.[131]

When originally Sanskrit words containing the consonants *k, g, kh* or *gh* appear in Uygur, they are spelled as K even when they share syllables with back vowels. Borrowed terms appear often to have been taken over through Sogdian, the script is in any case adapted from Sogdian and this is Sogdian spelling practice. The explanation proposed by Johanson 1993a: 96 that the Uygurs had used K and not X to represent the foreign unvoiced gutturals because they had felt them to be less velar than the back-vowel dorsal of their language (represented

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[129] The word for 'blood' had a long vowel in Proto-Turkic.

[130] The first syllable is said to come from an early Chinese pronunciation of this name (the modern Mandarin pronunciation being *fo*).

[131] See Röhrborn 1996: 179-180 on this question. Röhrborn approvingly quotes Clauson 1962: 103 and 105, taking his side against Sims-Williams 1981: 355, n.26 on the matter of Clauson's consistent reference to *gimel-ḥeth* where Sims-Williams distinguishes between the instances of *gimel* and of *ḥeth*, but Clauson was referring to Sogdian (and was wrong about that) whereas Röhrborn refers to the Uygur letter.

by X) may be just as valid. Röhrborn 1996 has a third explanation, that they were chosen because *caph* was unequivocally plosive while *gimel/ḥeth* had primarily been fricative in Sogdian, was still so in Uygur in the voiced domain and partly also in its unvoiced counterpart ([q ~ x]). The Sogdians could in any case not have used *gimel* or *ḥeth* for expressing stops as these letters exclusively represented fricatives in their language.[132] Röhrborn states that the spelling rules of Old Turkic need not be expected to hold also for borrowings, since the coexistence in one word of velar characters respectively serving front and back harmony is possible only in them. While this is correct, I still see a problem with Röhrborn's argument in the fact that the phenomenon is not limited to the Sogdian-Uygur alphabet but also appears in the Manichæan one, where both *caph* and *qoph* are used for both the front and the back velar (the latter dotted); but we find, in Manichæan writing, in M II 12,8, *trazuk* 'scales for weighing' with front K. Suffixes added to borrowings were spelled the Turkish way, which lead to words like *š(u)lok+ka* 'to the poem' (< Skt. *śloka*) being spelled with K in the stem but X in the suffix. Cf. also Erdal 2002: 5-7.

In Turkic words [x] is, among other things, the allophone of /k/ in contiguity with /š/ in back-vowel words, e.g. in *oxša-* 'to caress'. The DLT fol.144 also spells *ogša-* 'to resemble' (as well as a number of derivates from this verb) with *xā*, but that is the result of assimilatory devoicing which appears to have been rare in Uygur.[133] There, this verb had a voiced velar fricative, [*oγša-*] presumably still differing in pronunciation from *oxša-*. *ogša-* 'to resemble' is also spelled with *h* in at least six Brāhmī instances mentioned in OTWF 780, while we know from Windgott 50 (Manichæan writing) that it there (still) was a voiced and not an unvoiced velar; Brāhmī *h* was also used for representing [γ]. *takšur-* 'to compose verses' was probably also pronounced as *taxšur-*; the velar hardly ever seems to be spelled with the *q* dots in Uygur writing. The same applies to the onomatopoetic verbs *kaxšašu čaxšašu yorï-* in Ht IV 1541, the base of the latter appearing as *čaxša-* in DLT fol.569, and *sïxšal-* 'to get dense' in Ht VIII 1838. Finally *yaxšï* 'fine, appropriate', not attested before DLT and QB, clearly comes from *yak-*

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[132] Such a situation has actually developed spontaneously in Modern Hebrew, where *qoph* is the only letter used for rendering foreign [k] although *caph* also most often is pronounced as [k], because *caph* can also render the sound [x]; when quoting foreign terms or when outright borrowing them, this orthographic distinction serves unambiguous reading as [k] or [x].

[133] The EDPT is therefore probably wrong in spelling all Uygur instances of *ogša-* (discussed below) as *oxša-* as well.

ïš- 'to be suitable'. Sogdian *čyš'pδ*, perhaps pronounced as *čxš'pδ*, comes from Sanskrit *śikṣāpada* with *k*; this may mean that the fricativization of velars before /š/ may have been an areal phenomenon.

Zieme 1969: 36 gives a list of instances where *x* is written instead of *q* between vowels; these may either reflect a free alternation between stop and fricative, or they may be simple errors: Both in the Uygur and the Manichæan scripts, *x* differs from *q* only in that the former has one dot above the letter, the latter two.

Kāšġarī says that the Oguz and Kipchak pronounce onset back-harmony k as [x] in such words as *xayu* 'which', *xanda* 'where' and *xïzïm* 'my daughter'. Ottoman *hangi* and *hani*, Azeri *hara* 'where' and *haysï* 'which' show that there was such a process in the interrogatives; the velar of 'daughter' is a fricative in Volga Bolgarian (late 13th century).

The realisation as stop (i.e. as [g] or even perhaps as [k]) after sonants is partly observable also for /g/ (and not only for /δ/), as indicated by the word spelled *ärkli* in the Orkhon inscriptions: Phonologically or at least morphophonologically speaking this is *är-gli* with the participle suffix *-(X)glI*. What may have led to the pronunciation [ärkli] with [k] is the syllabification *ärk|li*, Old Turkic having no coda cluster [rg]. If the first velar character in *yapïrgak* 'leaf' is double-dotted in HTs VIII 15, this can, however, very well mean that it was /g/ pronounced as a stop and not as a fricative, rather than pointing towards a pronunciation *'yapïrkak'*. Further instances to be considered in this connection are *burkï* 'frowning; wrinkled (face)' attested in Uygur, Brāhmī and Arabic script and formed with the formative *-gI* described in OTWF § 3.110, the particle *ärki* which has been proposed to come from *är-* 'to be' by different suffixes starting with /g/, or the rather opaque *kulkak* < **kulgak* 'ear'. In other positions, the pronunciation of the weak velar appears to have been fricative. The /g/ of the words *arït-galï* 'for cleaning' and *yumurtga* 'egg' is spelled with *h* in BuddhKat: This can just mean that /g/ was here pronounced as a fricative [γ], but it could also have been pronounced as [x]: To judge by the diacritics of the verbs *agtur-* 'to raise', *agtïn-* 'to rise, climb, get to' and *agtar-* 'to throw, turn or roll something over, to translate' in Uygur script and the Manichæan and Brāhmī spelling of *agtïn-*, their velar had already gotten devoiced in Uygur; evidence is discussed in the UW entries and in OTWF 586, 734. The DLT a number of times spells *agtar-* as *axtar-*. Wordlist (Southern Brāhmī) also often spells /g/ as H after back vowels, e.g. in *agz+ï* "mouth", *kïrïg* 'selvage of the saddle', *azïg* 'elephant tusk' or *kasïg* 'inside of the cheeks' and even after front vowels, in *yig* 'bridle

bit', *ilig* 'attachment', *bügsäk* 'upper chest' and *bögür* 'kidney'. Editors often transcribe /g/ as *g* in words with front harmony but as *γ* in words with back harmony, implying that the back-harmonic variant of this phoneme was a fricative whereas the front variant was a stop. This practice reflects the spelling on the Semitic scripts adopted for Old Turkic: Semitic *gimel* was a velar fricative in Sogdian, the language from which the Uygurs took the script they used most often, whereas *caph*, which served for both front /k/ and /g/, represented a stop in Sogdian. Taking γ to symbolise a voiced velar fricative and an accent sign to symbolize palatal pronunciation, Doerfer's ǵ and γ (as e.g. in Shor, or in Anatolian dialects retaining the velar pronunciation of /g/ after vowels) are in fact probably more exact renderings of /g/ when not preceded by /r l n/.

As already noticed in OTWF 747, a number of verbs formed with the suffix *+gAr-* (with G documented as such in sources in runiform, Manichæan, Brāhmī or Arabic script) are causative counterparts of *+(X)k-* verbs: *äd+ik-* > *äd+gär-* as dealt with in OTWF 743 and in the UW, *ič+ik-* 'to submit, enter, capitulate' > *ič+gär-* 'to introduce, subdue, conquer' and *taš+ïk-* 'to go or step out' > *taš+gar-* 'to bring, give or get out' are formed with the addition of the causative suffix *-Ar-*. In *and+gar-* 'to make somebody swear an oath' < *ant+ïk-* 'to swear an oath' and *čïn+gar-* 'to investigate something' < *čïn+ïk-* 'to be confirmed, found genuine' the /g/ is solidly documented only by the DLT and further research is needed to determine whether especially *čïngar-* and the petrified converb *čïngaru* were pronounced as here spelled in Uygur as well. The alternation between the two velars is not necessarily one of voice; it *may* also be that G was chosen for the causative because the velar was, in this position, pronounced as a fricative and not as a stop. This, however, is only a hypothesis. The alternation is no doubt related to a distributional difference which we find in Orkhon Turkic[134] concerning the appearance of the letters *k* and *g* after consonants within stems: /k/ is found practically exclusively after /r l/, in *alkïn-*, *ilki*, *kulkak*, *yïlkï*, *arka*, *arkïš*, *tarkan*, *tarkïnč*, *tokurkak*, *irkin, ärkli, ärklig*. The only exception is *yuyka* 'thin', attested twice in Tuñ 13.[135] No such limitations exist, on the other hand, for /g/:

[134] This is based on the documentation of Tekin 1968: 88-91; proper names and what I consider to be errors have been excluded.

[135] This shape of the word is isolated, as Old Uygur has *yuka* and Qarakhanid *yuvka* or *yupka*. The word is well attested in Middle and Modern Turkic languages but none show a *y* or any reflex of one. I don't think one can take it to be a mason's error if a

Beside lexemes with /lg/ such as *bilgä, bulga-* or *tolgat-* and /rg/ such as *kärgäk* or *tirgür-* we also find ones such as *ïčgïn-, adgïr, ädgü, tamgačï, amga, ämgäk, ingäk, kïsga, bašgu, tavïšgan, bošgur-* or *kazgan-*. There thus appears to have been a complementary distribution within stems, which does not hold before inflexional suffixes, but *+gAr-* clearly did not count as inflexional: The dative suffix is always spelled with K, e.g., while the directive suffix always has G.[136]

The phonemic opposition /k/ : /g/ is solid after vowels, e.g. in *akï* 'generous, virtuous' vs. *agï* 'treasure', *äk-* 'to sow' vs. *äg-* 'to bend' and *oxša-* 'to carress' vs. *ogša-* 'to resemble'. However, it seems difficult to find such minimal pairs for other positions.

The alternation /ŋ/ ~ /g/ (i.e. the neutralisation of the opposition of nasality in the velar domain) occurring in Orkhon Turkic is not a purely phonic matter, as it there takes place only with the 2nd person possessive suffix (used also in the preterit suffix); it is documented in section 3.122. This is a dialect characteristic which, according to DLT fol.350, also occurs in some Argu dialects. It does not happen in the 2nd person plural imperative suffix (where /ŋ/ is in the coda as with the possessive singular), nor with the genitive (whose Orkhon Turkic variant after consonants is *+Xŋ*) nor, in Orkhon Turkic or in Uygur, in stems. As a quite different phenomenon, the Mait (as listed in Laut 1986: 71-74), the HamTouHou text 18, a few Manichæan texts and the DLT sporadically spell /ŋ/ as K in Uygur and Arabic script (where this letter is used also for /g/). This is a purely graphic matter, as (front) K appears in back-vowel words as well. A few Uygur mss. (dealt with by Zieme 2002) spell [ŋ] as K with a superposed dot. Rarely, /ŋ/ and /g/ do alternate in the DLT: 'elephant' there is *yaŋan* (not among the Oguz) or *yaɣan* (cf. Uygur *yaŋa*); *sa:* ‚to you' < *saŋa* in DLT fol.536 and the address *tärim* < *täŋrim* in DLT fol.199 presumably passed through a stage with /g/.

/ŋ/ does not consist of the sequence /ng/, although the Semitic writing systems spell it that way under front synharmonism. /n/ + /g/ gives /ŋ/ neither in stems like *ingäk* 'cow', nor when a stem ending in /n/ is followed by suffix (e.g. the directive) starting with /g/. This may have been different prehistorically in view of the fusion of *+gArU* with the 2nd and 3rd person possessive suffixes to give *+(X)ŋArU* and *+(s)IŋArU* and taking *ärŋäk* 'finger' and *yaŋak* 'cheek-bone' to come from *är+än*

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word occurs twice, as assumed by EDPT 874a; it might be a dialect peculiarity, however, and is in any case likely to be secondary.

[136] See section 3.124 for a discussion of the nature of the velar of the dative suffix.

'men' and *yan* 'side' respectively.[137] Cf. also *käliŋünüm* 'my daughters-in-law' in Orkhon Turkic KT N9, assuming *kälin* 'daughter-in-law' + collective suffix *+(A)gU* + pronominal *+n+* + 1st person possessive suffix (which is not completely regular, as the collective suffix otherwise loses its first vowel only after vowels). The 2nd or 3rd person possessive suffixes in the dative case, *+(X)ŋA* and *+(s)IŋA*, show an otherwise unattested prehistorical contraction /nk/ > /ŋ/.

There is no doubt that Proto-Turkic had an */h/ phoneme in the word onset; this */h/ is retained systematically in Khaladj and sporadically in other modern languages, and has left reflexes in Old Turkic. The matter is dealt with in Doerfer 1980 (text of a lecture presented in 1976; German translation Doerfer 1995), who showed that /h/ appeared in some words which became parts of ethnonyms appearing in a Tibetan document from the 8th century (see below) and that an Old Turkic onset alternation *yï* ~ *ï* is a reflex of */h/. Doerfer 1980/1995 only deals with cases where the vowel preceding sporadic /y/ is /ï/, e.g. *(y)ïgač* 'tree', *(y)ïgla-* 'to weep' or *(y)ïrak* 'far'. Sporadic /y/ does, however, appear also before other high vowels: We have *yün-* 'to come up' in BlattRun 16 and 22 where most sources have *ün-*; *ürt-* 'to cover' has a variant *yürt-* in *yürtgün* (Mait 167 v 31) and *yürt-ül-* (Maue 1996, Mz 652 = T II S 19 b v4 in Brāhmī). Uygur *ïšïg* ‚cord, cable' corresponds to Qarakhanid *yïšïg*; on the other hand, Uygur *yirig* 'rotten' corresponds to the DLT's *irig* (twice).[138] Cf. also Gabain 1941: 52 and see the (approximately ten) verbs discussed in the OTWF as mentioned in the glossary (858b-859a): Most of these have high vowels in the first syllable; two instances with /ö/ are less certain. /h/ did occur at some stage before low vowels as well, as shown by the tribe names *Ud hadaklïg* 'bovine-footed' and *Hala yuntlug* 'possessing parti-coloured horses' appearing in the 8th century Tibetan itinerary on the peoples of the north (see Ligeti 1971, Tezcan 1975 and Moriyasu 1980); the words *hadak* and *ha:la* are the ones normally known as *adak* 'foot' and *ala* 'parti-coloured'.[139] Another term twice appearing with *h°* in that source is the title known well as *irkin* from Orkhon Turkic and Qarakhanid sources. The itinerary is not written in Turkic but in Tibetan, which

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[137] See OTWF 75 for these etymologies and cf. OTWF 165-166 for *oŋay* 'easy'.

[138] *yirig* / *irig* comes from Qarakhanid *iri-* / Uygur *yirü-* 'to decay, rot' and may be related to *yiriŋ* ~ *iriŋ* 'pus'.

[139] With other words in the itinerary, among them *Ho-yo-hor* referring to the Uygurs (= *Hui hu* in Modern Mandarin Chinese, *Hayhurlar* in the late Kaš Xatun text presented by Peter Zieme at the 5. Deutsche Turkologenkonferenz in Mainz in October 2002, matters are a bit more complicated.

could have borrowed them at an earlier stage or from a dialect (like Khaladj) which did (unlike Old Turkic as attested in the sources) regularly retain /h/. Doerfer 1981-82a has argued that Orkhon Turkic also had /h/ as an actual sound, from the fact that the runiform character A sometimes (but not always) appears in the onset when comparative evidence makes us expect a word to start with *a:*, but never when it makes us expect that a word starts with *ha:*. This argument does not really seem to be convincing, as the data he adduces are scant and inconclusive. Is there any proof that this *h* did *not* exist as such in Old Turkic, then? The runiform and Uygur script just had no such character, and the y ~ Ø alternation, which is a rather common reflex of */h/ in Uygur (including the runiform manuscripts), does not appear to take place in the inscriptions of the Türk and Uygur kaghanates. The Manichæan script did have a letter for this sound: We find it several times in the Xw in the Parthian sentence *man astar hirza* ‚Forgive my sins!‘ and also, without phonetic value, to fill in the ends of lines (e.g. *közünür+tä+kih* ‘the present’ in TT IX 46) or before holes in *pothi* leaves (e.g. *burxan+lar+kah* in TT IX 52). The Xw sentence is an instance of code switching (or it may have been an unintelligible formula for some of the lay people) and the words cannot be treated as borrowing. One might think that [h] should have appeared explicitly in texts written in Manichæan script if original Old Turkic words had retained it in these sources. However, the Uygur, Manichæan and Syriac scripts were all taken over from the Sogdians, whose language had lost this sound: Doerfer mentions Sogdian *’βt* corresponding to Persian *haft* etc. So we get no help in this question from Manichæans and Christians. Then the scripts of Indic origin should have been explicit about this sound if the individuals using them had had *h*°, but we find that the relevant characters are not used. Words in texts in Brāhmī script spell the relevant words without H, with the exception of the word *hükün* ‘heap’. Doerfer already noted that the small texts in Tibetan script dealt with by Clauson do not show onset /h/ and says that these and the Brāhmī texts are late. Nor, crucially, does the presumably 10th century Buddhist catechism in Tibetan script have the letter *h* in Turkic words: *adak* ‘foot’, *adïr-* ‘to separate’, *ag-* ‘to change’, *äv* ‘house’, *ogrï* ‘thief’, *öl* ‘wet’, *öl-* ‘to die’, *üz-* ‘to rend’ are here spelled without inital H although their Khalaj cognates do start with /h/; *üntür-* ‘to bring out’ is spelled with *y*° but so is *üč* ‘three’. In view of all this, no unvoiced pharyngial fricative can be posited for Old Turkic proper.

2.35. The sibilants

We take Old Turkic in general to have distinguished between two voiceless sibilants, alveolar /s/ and palatal /š/, though not all runiform texts and sources in Uygur writing consistently distinguish between them. Manichæan writing has two quite different characters, but a few Manichæan texts (quoted by Zieme 1969: 37-38) show S where other Turkic sources have Š. This appears to be a phonological or phonetical rather than a graphemic matter, as shown by the fact that /š/ is spelled in regular fashion in the same mss. in Middle Iranian stretches. Zieme thinks that this might be a dialectal characteristic of these texts. The various runiform characters for front and back /s/ and /š/ also alternate in the different runiform inscriptions, both in that different inscriptions show different distributions and as alternation within the same inscription; e.g. the BQ inscription has much more Š characters than the largely parallel KT inscription, which is two years earlier. This complex matter was dealt with by Thomsen 1896: 38, T.Tekin 1966 and 1968: 61-2 and 93-98, Amanžolov 1970 and Tenišev 1971. S.E. Malov proposed in this connection that /š/ probably existed in the literary language but that the Orkhon Turks actually pronounced both common Turkic phonemes as /s/, and Tekin 1968: 94 agrees with him.[140] The inscriptions of the Uygur Steppe Empire and most runiform mss. (notably the IrqB) have no Š letter at all; some runiform mss. use s^2 with a diacritic line above it to represent $š^2$. The suffix *-mIš* is regularly spelled as -mIs^2 in the Orkhon inscriptions, which do have the letter Š (also after stems with back synharmonism); the Uygur runiform ŠU inscription, which does not have Š, does use -mIs^1 with back-harmony stems. The problem posed by such alternation has not been satisfactorily explained as yet.

/z/, the voiced counterpart of /s/, is solidly attested and well discernible in the writing system; see the next section for /z/ ~ /r/ alternations.

/ž/, the voiced counterpart of the palatal fricative /š/, is found in borrowings, e.g., in *ažun* ‚existence, life‘, *užïk* ‘letter of an alphabet’, *küžäl* ‚nice‘, *trižul* ‘trident’, *aržï* ‘*ṛṣi* (a class of beings in Indian religions)’, *možag* (a Manichæan title), *čïnžu* ‘truth’, *amžu* ‘offering averting demons’ or *küži* ‘incense’. In case it did exist in genuine Turkic words, then only as an alternant of the unvoiced palatal affricate

[140] Texts reflecting a more spoken language, such that wrote e.g. *-sA* for the conditional suffix *-sAr* or *käräk* for *kärgäk* ‘necessary’, show no evidence for /š/ becoming /s/.

/č/ (see below). In Suv, we often find *ažun* spelled as *ašun*: This may be an instance of voice confusion in spelling; it may also be, however, that we here have evidence that this foreign sound was replaced by the indigenous /š/. The same can be said e.g. in the case of *aržï,* which is also spelled with Š a few times in late mss. such as BT III, Shō, Suv and some from the ETŞ (see UW 221).[141]

The 3rd person imperative suffix *-zUn possibly* had a voiced palatal fricative [ž] or affricate [ǰ] in its onset: It is, in one instance in a runiform ms., spelled with the relevant diacritic on the Z sign and, in one inscriptional case, with the runiform letter for /č/; see section 3.23.

2.36. The liquids

The liquids /r l/ and the alveolar nasal /n/ are sometimes grouped together as 'sonants' because they share certain traits of behaviour; in some cases /z/ also behaves like them. The sonants have certain characteristics in common, which also distinguish them from other consonants: Among other things they can be used as first element in consonant clusters at the ends of syllables; other consonants (e.g. the voiced alveolar) appear with stop allophones when preceded by them.
Sitting astride on the synchrony / diachrony distinction on the one hand and the word formation / morphology distinction on the other is an irregular and badly understood alternation between /r/ and /z/. In morphology we find /z/ in the suffix of the negated aorist, where the positive aorist has /r/: *-r* (a variant of the suffix appearing after vowels) vs. *-mA-z*. Other instances of the alternation fall more into the domain of etymology. The cases of *+sXz,* the privative suffix vs. the formative *+sIrA-* derived from it, *sämiz* 'corpulent' vs. *sämri-* 'to be or become corpulent', *sekiz* 'sharp-witted' vs. *sekri-* 'to jump, hop', *sa:z* 'pale' vs. *sarïg* 'yellow' (< **sa:rï-g*) replacing it, *yultuz* 'star' vs. *yultrï-* 'to gleam or shimmer', Ottoman *yaldïz* vs. Old Turkic *yaltrï-* 'to glimmer', *töz* 'root, origin, element' vs. *törö-* 'to come into existence' and *yavïz* 'bad' vs. *yavrï-* 'to be or become weak' may all be explained by the fact that the /z/ appears at the end of its stem while /r/ is followed by a vowel; all these instances are discussed in the OTWF. One might want to decide that the /r/ is primary and the /z/ secondary by making the coda position responsible or one could see it the other way around, considering the /r/ to be caused by the presence of a vowel after it. Looking at *äsiz* 'woe; alas' vs. *äsirkä-* 'to regret the loss of someone or something', *käz*

[141] These instances are less likely to be reminsicences of the Sanskrit form.

'notch' vs. *kärt-* 'to notch', *kïz* 'girl' vs. *kïrkïn* 'maidservant' or *közsüz* 'eyeless' vs. *kösürkän* 'mole'[142] one would prefer the first explanation: In all these cases the /z/ is at the end of the stem while the /r/ is not, though there is a great variety in what follows the /r/. The final position of /z/ in *küntüz* 'during daytime' vs. /r/ in the composite suffixes *+dXrtIn*, *+dXrAn* and *+dXrtI* points in the same direction. There is a related alternation *z* ~ *rs* in *tirsgäk* 'elbow', presumably from *tiz* 'knee', and *borsmok* 'badger' and *borslan* (a jingle with *arslan*), both in the DLT, presumably from *boz* 'grey, grey-brown'. Here, again, the /z/s are at the end of the stem while the /rs/s are inside theirs. The same explanation could be appropriate for *köz* 'eye' vs. *kör-* 'to see' and *kutuz* 'raving dog etc.' vs. *kutur-* 'to rave', taking into account the fact that verb stems appear much oftener with suffixes than nominal stems.[143] All this does not help us on in a case like *tägzin-* 'revolve, rotate, travel about' (with derivates and /z/ cognates such as *tägzinč*, *tägzim*, *tägzig* etc.) vs. *tägrä* 'surrounding', *tägriglä-* 'to assemble people around something', *tägirmi* 'around', *tägirmän* 'mill', unless we are ready to make some bold etymological assumptions. The explanation could, however, very well apply to *-mAz* vs. *-r*, if we take the suffix to have originally had an additional vowel.[144] This vowel would have dropped in the negative form earlier than in the positive, as stress was on the syllable preceding *-mA-* in the first case but on the suffix in the second. When it dropped from the positive form as well, the *°r#* > *°z#* rule would no longer have been operative. Some of the mentioned connections may admittedly be spurious, but our account of the evidence has not aimed at exhaustiveness; there will in any case remain enough evidence for the alternation r ~ z, which got so intertwined with the Altaic question.[145] The OTWF discusses a similar alternation between /l/ and /š/.[146]

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[142] See the discussion in OTWF 88.

[143] The stem of *kör-* might also possibly originally have been **körü-*, seeing that the aorist of this verb is *körür* and not *'körär'* (as would be expected from simple single-syllable verbs). *arslan* 'lion' could then be connected with *az-* 'to rave' if *kaplan* 'leopard' comes from *kap-* 'to snatch'.

[144] The aorist suffix has been connected with a Mongolic suffix which does have an additional vowel.

[145] Common Turkic /z/ appears as /r/ in cognates in Chuvash-Bolgar and Mongolic.

[146] The note to Ht VII 670 derives *ötlüm* from *ötür-*, appearing to assume an /l/ ~ /r/ alternation; but no such alternation is attested in Old Turkic. I would consider it more likely for *ötlüm* to be related indirectly, by coming from an *–(X)l-* derivate of the base.

2.4. *Phonotactics and phonetic processes*

Phonotactic rules may have been different for genuine Turkic words and for loans. *bodisatv* (with variant *bodisavt*; class of Buddhist deities) was, e.g., probably pronounced with a coda cluster which was not found in Turkic words, and probably mixed front and back vowels. When writing down borrowed words scribes could always to some degree be guided not only by the way Turks pronounced these, but also by how they were spelled in their original languages and especially in transmitting languages; this is true especially for religious texts, and in particular in source languages like Sogdian, for which the same writing systems were used as for Uygur. Still, Turkic phonotactics did interfere, e.g. by putting vowels before /r/'s which appear at the beginnings of foreign words, or by occasionally breaking up consonant clusters. Concerning borrowings, therefore, we cannot content ourselves with looking at single spelling instances of words, but look at the whole set of variants, to see how pronunciation and spelling might have evolved in the context of the conflicting tendencies of Turkisation on the one hand and learned rendering on the other. To give just one example, the word signifying 'planet' spelled as KRX cannot automatically be expected to have been pronounced as '*grax*' and get transcribed as *gr(a)x* just because it had an onset cluster in Sanskrit; the Turks might just as well have broken up this onset cluster. Nor should one automatically assign changes in borrowed lexemes to the influence of Turkic: If Sanskrit *bodhisattva* appears in Uygur also as *bodisavt*, the loss of the coda vowel should have taken place already in the Aryan dialect which served as source of the borrowing; the metathesis *tv* > *vt might* be an internal Turkic matter but *could* also have existed in an intermediate language through which the word reached Uygur; the shape of a lexeme in the ultimate source language is not really relevant. What interests us primarily in this descriptive work are the synchronic rules which can be extracted from our material: e.g. the fact that all parts of Old Turkic show quite a number of borrowed words with onset /l/ as compared to the scarcity of onset /r/, even though both are equally barred from original Turkic phonotactics.

2.401. Vowel assimilation by vowels

The central phonotactic phenomenon of Turkic languages is syn-harmonism, a grammaticalised progressive assimilation functioning on the level of syllables, determining the choice between classes of vowel phonemes and between allophones of consonants; it has been called

vowel harmony because it typically works on the subphonemic level for consonants but on the phonemic level for vowels. The structure of Old Turkic synharmonism has already been referred to in section 2.2 and its functioning at morpheme junctures will be described in section 2.51. It could also have been described among phonotactic phenomena in that it consists of a set of relationships between elements in the sound syntagm constituting the word. It has been often stated that vowel harmony determines the borders of the word; this is true of the phonological word only: The morphological word is often shorter than the phonological, in that clitics are included in synharmonism; the lexical or semantic word is often longer than the phonological, in that lexical units can consist of several morhological words. The identity of Old Turkic sounds is not, however, determined by synharmonism alone.

Backward vowel assimilation can concern lip rounding, raising or fronting. Backward rounding of vowels can be observed occasionally, e.g. in *ärtüŋü* < *ärtiŋü* (KP 3,8), *tägülök* < **tägil-ök* 'blind'[147] (KPZieme 1), *sugun* < *sïgun* (TT VII 29), *taŋusok* < *taŋïsok* (< *taŋ+sok*, BT XIII 46,35), *tägünür män* in a text in Tibetan script excerpted in Clauson 1962: 99, *yertünčü* < *yertinčü* (KP 14,8, 47,6 and 78,3, BuddhKat 24 and 42), *kügür-* < *kigür-* 'to introduce' (see OTWF 750 and 817) or *nugoš[ak* in ms. Mz 169 (= T I x 21, published in Sertkaya 1985). In *körtgünč* < *kertgünč* (UigSukh 38) and *örgür-* < *er-gür-* (documented in OTWF 575, 749 and 755-6) low vowels are rounded. *yaratunu uma-* in KT E 10 shows that the phenomenon is old.[148] Backward unrounding is rarer; it happens with the instrumental ending, e.g. in *ögrünčüligin* < *ögrünčü+lüg* (MaitH XX 1r7) or *umugsïzïn* (Suv 19,17 together with *ïnagsïzïn*) < *umug+suz*.[149] Accusative forms such as *özimin* < *öz+üm+in* or *ögimin* < *ög+üm+in* are attested a number of times in DKPAM mss., and cf. *yumïš+čï* < *yumuš* in BT VII A387. These could, however, be mere spelling peculiarities, as we also find

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[147] The generally attested derivate from *tägil-* 'to be blinded' is *tägl-ök*. The additional second vowel is more likely to be secondary (as with the next word mentioned) than to have been retained from the original verb base. Cf. *yaŋïlok* < *yaŋïl-* in U II 87,54 and *basurok* < *bas-ur-* in ShōAv 317 and BT XIII 39,22, where the old and widely attested variants of 'error' and 'oppressor' are *yaŋlok* and *basrok*.

[148] There appears to be another inscriptional instance in l.4 of part B of the Qara Balgasun inscription (Uygur Steppe Empire): In a footn. to BlattRun p.301 Thomsen proposes reading *nugoš[ak*, basing his proposal among other things on Radloff 1894: 293. Orkun 1938: 38 followed the Finnish Atlas, which has the impossible $n^1wg^1wr^2$.

[149] Cf. $+s^2zn^2$ in Tuñ 35 in a back-vowel word. On the other hand, *+sXz may* have been originally unrounded, as shown by the formative *+sIrA-* derived from it.

yumiš in BT VII B35 and also the accusative form *ögiz+üg* < *ögüz* 'river' in BT VII B31 and 33.

Backward raising influence is found in forms such as *ešidtür-* (e.g. U I 6,3 in a Christian text), *eštil-* and *eštür-* from *äšid-* 'to hear'; Brāhmī sources in fact have 13 instances of *ešet-* / *ešit-* / *ešid-* 'to hear' (with derivate) vs. only two of *äšid-*. Thrice *el(i)t-*, which exists beside *ält-,* and thrice *elig* for *älig* 'hand' in Brāhmī sources (thus making it homophonous with the word for 'king') in Brāhmī sources must also have come about through regressive assimilation. The emergence of *iki* (not *eki*; see the end of section 2.22) from *äki* 'two' may have the same explanation.[150]

Backward fronting can only take place when two words become one, as Turkic words by themselves are front or back as wholes. We have this phenomenon in *bökün* 'today' in *bökün bar yaran yok* 'here today and gone tomorrow' (Maitr Taf.118r12 = MaitH Y 12b27, Gedanken p. 133) < *bo kün* 'this day'.

Beside synharmonism and the mechanism described in section 2.51 which makes /o ö/ appear in suffixes in which alternating back and front vowels are followed by /k/ unless the vowel preceding the suffix is /u/ or /ü/, Old Turkic in addition had what can be called vowel attraction. By this phenomenon (found in Kirgiz, Kazakh[151] or Turkmen), not only [o] and [ö] but also [e] turn up in non-first syllables of Turkic words: Texts in Indian scripts show that /u/ was often realised as [o] and /ü/ often [ö] and /i/ was *sometimes* realised as [e] when they were preceded by these same low vowels (see section 2.22), with full assimilation. Even more rarely than the last mentioned assimilation, there sometimes also took place a lowering of vowels even when they were not similar in roundedness: [e] could (rarely) cause [ü] to become [ö] and [ö] could (rarely) cause [i] to become [e]. This is neither palatal nor labial harmony but an attraction in the domain of vowel height. In all of these processes it does not matter to which archphoneme a sound belongs; members of /X/ are by no means more prone to assimilation than members of other archphonemes, as maintained by various scholars from Gabain to Johanson. /o/ and /ö/ did exist in non-first syllables of nominal and verbal stems with /o ö/ in the first syllable, as shown by spellings in alphabets which make the distinction between *o* and *u* and between *ö* and *ü* visible, namely the Tibetan script and the Tokharian and Khotanese varieties of Brāhmī (the latter in Wordlist).

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[150] The same process is responsible for Yakut *ilii* 'hand' and *tirit-* 'to sweat' which is related to *tär* 'sweat'.

[151] See Erdal, 1994.

These writing systems represent different traditions, and the texts our statement is based on were written down over several centuries in widely differing places and cultures. This assimilation is found in numerous lexemes and suffixes, often in free alternation with *u* and *ü*. We find *kolo* 'moment' (twice in Maue 1996), *köŋöl* 'spirit' (twice BuddhKat; in TT VIII and Maue 1996 14 times *köŋöl* vs. 9 times *köŋül*), *kövdöŋ* 'body', *ordo* 'army camp', *oron* 'place' (TT VIII L & D and twice in Maue 1996 vs. *orun* in Maue 1996 nrs. 26 and 27), *orto* 'middle' (TT VIII L, Wordlist, Maue 1996 nr. 24 but possibly *(o)rtu* in TT VIII I23),[152] *osog* 'manner' (Maue 1996 nr. 52), *öŋöč* 'larynx' (Wordlist), *sögöt* 'tree' (TT VIII K10),[153] *toko* 'belt buckle' (Wordlist), *tokoz* 'nine' (BuddhKat, Maue 1996 nr. 51 against *tokuz* in TT VIII L), *töpö* 'hill, top' (twice in TT VIII K3),[154] *törö* 'teaching', *yogon* 'thick', *yogto* 'mane', *yorončga* 'clover', *odog* 'awake' (TT VIII E25 and 41), *ogol* 'son' (thrice in TT VIII D and O) *bodo-* 'to paint, copy' (Maue 1996 nr. 21), *olor-* 'to sit' (TT VIII B16 and C 12 and ĀṭSū 4 v c), *odon-* 'to wake up, be awake' (4 times in TT VIII E).

If we were to propose taking these vowels to be members of archphonemes, we would have to state to which ones they belong: They may be instances of the lowering of /U/ or the rounding of /A/. Comparative evidence speaks for the latter in the case of Turkish *orta*, *toka*, *tepe*, *gövde, boşa-, boya-*, Chuvash *lar-* 'to sit' which correspond to Old Turkic *orto*, *toko*, *töpö*, *kövdöŋ* and *olor-*, but for the former in the case of Turkish *ordu*, *gönül*, *söğüt*, *dokuz*, *yoğun*, *oğul*, which correspond to *ordo*, *köŋöl, sögöt, tokoz, yogon* and *ogol*; but then one would have to investigate the matter in a way taking other Turkic languages as well into consideration. Classical Mongolian *orda* and *töre* are no proof, as second syllable Old Turkic /U/ also has /A/ as Mongolic counterpart: cf. Old Turkic *altun* 'gold' and *küdägü* 'son-in-law' vs. Mongolic *altan* and *küregen*. Nor is Yakut evidence significant, in view of, e.g., the Yakut causative suffix *-tAr-* corresponding to Old Turkic *-tUr-*.

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[152] The source of the unrounding in *otra* (e.g. DKPAMPb 13 or Ht III 334 and 339) may be the case form in *+rA*, among the instances of which 'middle' fits in very well semantically; *otïra* with helping vowel (e.g. Abhi A 109a9) is a further development. The primary form could, however, also be *orta*: Pure unrounding, as found in Turkish *säksän* '80' and *toksan* '90' < Qarakhanid *säksön*, *tokson* (< earlier *säkiz on*, *tokuz on*) does not seem to occur in Old Turkic, though typical for Mongolic (e.g. *altan* 'gold').

[153] The editor has a wrong interpretation, as guessed in the EDPT; correct reading in Maue 1983: 64, n.51.

[154] By the editor misread as *'töhö'* and translated as "Hirse"; read correctly by Maue 1983: 59 n.40. The /i/ of *tögi* 'crushed millet' would hardly have been rounded.

The assimilation of [u] to [o] takes place also in suffixes; we have it in the following forms: the vowel converb *-U* appearing with *-o* / *-ö* in *tol-o*, *ör-ö, kötör-ö* and *ötr-ö* (thus 5 times in Maue 1996, TT VIII and BuddhKat vs. once *ötrü*); with *-gU,* the suffix of projection participles, in *öl-gö+s[in]tä* (Maue 1996 nr. 4); with the formative *-(U)t* in *yogr-ot* 'yogurt'; finally, in the aorist suffix *-Ur* as *-or* / *-ör* in *olor-or, kod-or, odon-or*, *ökön-ör* (vs. *-ür* in the same environment in *közön-ür)* and the very common *b(o)lor* (41 times in Maue 1996 and TT VIII vs. 6 times *bolur* in the same sources and 4 times *bolur* in BuddhKat). With *bošo-* in *]güläri bošomïšïg [* in Maue nr. 27,16, translated by the editor as "den, dessen […] (pl.) befreit sind", the matter is more complicated.[155]

We find the assimilation to /o ö/ also within the archphoneme /X/ in *yör-ög* (Maue 1996 nr. 14 and 26) with the formative *-(X)g,* in *kötröl-* thrice in Maue 1996 with the passive formative *–(X)l-,* in *kötör-öp* in Maue 1996 nr. 30 with the converb suffix *-(X)p*, in *nom+og* and *yörög+ög* in the accusative suffix in Maue 1996 nr. 28, in *osog+log* 'like, in the manner of', *tör+lö[g], nom+log* and *öz+lög* with the suffix *+lXg*, in *ögröncłög* (TT VIII A6) with the suffix *-(X)nč* in *köŋöl+öŋöz+lärtin* (TT VIII E47) with a possessive suffix, etc. The last-mentioned instance shows that /A/ is not rounded. Sometimes assimilation does not take place even with /U/ and /X/, e.g. in *köl-ük* 'vehicle' and *törlüg* (both Maue 1996 nr. 51), *töz+üg* and *bol-zun* (both Maue 1996 nr. 33; the latter also 7 times in Maue nr. 79 and in TT VIII G vs. twice *pol-son* in TT VIII E) or in *taloy+nuŋ*, *öŋ+dün, bogunlug*[156] and *adrok+suz* (all four Maue 1996 nr. 21). The mss. Maue 1996 nr. 3 (*öl-ür-sär* and *ätöz+üg* vs. thrice *bol-or*), 29 (*örkün* 'throne', *yör-üg*, twice *olur-* 'to sit', twice *nom+ug*) and 44 (*törtünč, tözlüg,* twice *törü*, twice *nom+ug*) appear to have /u/ after /o/ rather consistently; 23/12 has

[155] Old Turkic has a transitive denominal formative *+A-* and an intransitive *+U-*. As discussed in OTWF 477-8, Qarakhanid *bošu-* or *bošo-* is both tr. and intr., while only tr. *bošu-* or *bošo-* was hitherto documented in Uygur, until Maue proposed his translation. This would accord with our expectations, as it would be normal for *+U-* to be realised as [o], were it not that the context of this instance is so fragmentary and that no other intr. *bošu-* / *bošo-* seems to have turned up in Uygur. For /a/ to become /o/ seems unusual for Old Turkic as a whole, however, and for the *+A-* formation in particular, as we find unrounded *ota-, kora-, tona-, tölä-, öčä-, köŋlä-* and *orna-*. So word formation will have to stay with its irregular tr. *+U-* as far as this verb is concerned, and can assume an intr. *+U-* beside it, which lowered its vowel in this Brāhmī passage.

[156] Wrongly spelled *togunlug*, which gives no sense. *bog-un* 'articulation in a person's limbs or in the trunk or stalk of a plant' – discussed in OTWF 305 – is no doubt an *-Xn* derivate from *bog-* 'to strangle'.

öŋlüg, [ö]ŋdün, bölük and *tözlüg* in one sentence vs. numerous instances of *o – o* elsewhere in the text.

In a few cases, the lowering of /U/ and /X/ takes place also when the preceding syllable has /e/.[157] It is noteworthy (and difficult to explain if not coincidental) that /a ä/ do not cause such lowering. As these environments are thus limited to the presence of low vowels in the preceding syllable, the presence of the phonemes /o ö/ in non-first syllables would not follow from these instances. Old Turkic non-first syllables thus had /o ö/ as phonemes (e.g. in *ïdok* 'sacred'), and in addition [o] and [ö] as allophones when preceded by these same phonemes.[158]

2.402. Vowel assimilation by consonants

In contiguity with /g r l/, what we would expect to be /ï/ is quite often spelled with *alef* (e.g. *amal* 'spiritual peace', *tat-ag* 'taste', *bar-amlg* 'well to do', *yaran* 'tomorrow' or *+lag* for *+lXg*), reflecting a real lowering of the vowel in these surroundings. This is not to be confused with the general spelling of [ï] with *alef* which we find quite often though irregularly in pre-classical texts. We know about this lowering primarily from evidence in Indic scripts, the texts which use these generally not being particularly early. In BuddhKat, e.g., we find /ï/ realised as [a] (or at least psychologically assigned to the /a/ and not the /ï/ phoneme) when adjacent to /g/ in *aba-g* (< *apï-g*), *ara-g* 'clean' (beside *arï-g*), *arag* 'wood (small forest)' < *arïg*, *at+lag* (beside *at+lïg*) 'rider', *didim+lag* 'wearing a diadem',[159] *ayag* 'bad' < *ayïg*, *kač-ag* 'point of contact with the physical world' and *sarsag* 'repulsive'.[160] Brāhmī writing has such variants especially in the ms. TT VIII I.[161]

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[157] E.g. *etgö özi* (Maue 1996 nr. 50) < *et-gü özi*, *enčgölögkä* (TT VIII A36), *kertgönčlög* (TT VIII A 33) < *kertgünčlüg* or *yertönčö* 'world' (TT VIII N4) < *yertünčü* < *yertinčü.*

[158] This was still doubted in Gabain 1974 § 23 and Zieme 1969: 43. As evidence against the presence of /o ö/ in non-first syllables, Zieme mentioned the adverb *küntämäk* ‚daily', analysing it as ‚*kün+täm äk*' with the particle *Ok*. I would rather analyse this word as **kün+tä (y)mä (ö)k* with two particles, and the vowel of *(O)k* elided; see section 3.342 for *mA* as variant of *ymä*. The derivational suffix *+dAm* forms nominals denoting similarity to the base noun, a meaning which does not suit this word. Cf. *inčäk* ‚thus' < *in+čä (ö)k*.

[159] See the section 2.52 for the possibility that this be read with an [ï] in the second syllable and for the harmony rules for suffixation in borrowings in general.

[160] I am only giving those instances where the reading as *a* is unequivocal; some further spellings might be considered as well.

[161] It has the accusatives *aš+ag* 'food' (2 and 8) and *turmak+ag* 'remanence' (22), the deverbal formatives *ak-ag* 'flow' (7) and *aba-g* 'protected' (21), the *+lXg* derivates

Evidence for this phonetic phenomenon in Semitic scripts is by no means limited to Manichæan or pre-classical texts, as sometimes thought; in TT X, e.g., we have *tap-ag* 'service' and the accusatives *sav+ag* 'word', *burxan+ag* and *arxant+ag*, in KP *kar-am* 'moat', *as-ag* 'benefit' and *tat-aglïg* 'tasty' (beside *u-ma-dam* 'I was unable', which has none of the lowering consonants). In the runiform ms. BlattRun 14 we read *taš+ag alsar* 'if one takes the stone (acc.)'.[162] The phenomenon is documented even earlier than Orkhon Turkic: Among the Turkic terms appearing in Bactrian as edited in Sims-Williams 2000 we have *tap-ag+lïg* 'revered' in texts dated to the years 640, 679 and 682; the Greek writing used for Bactrian clearly distinguishes between α and ι. The spelling of the name + title *tapglg saŋun* in Maḥrn 56 is also better interpreted in this way.[163]

Occasionally we find what looks like the opposite process, low vowels getting raised beside /r/ or /l/: *arïla-* < *ara+la-* ‚to intercede', *arïčï* < *ara+čï* ‚intercessor', *övkilä-* < *övkä+lä-* 'to be furious', *bulïtčïlayu* / *bulïtčulayu* 'like a cloud', *ančulayu* and *munčulayu, bizinčüläyü*, *siničüläyü* and *sizničiläyü* all < *+čA+lAyU*. This must be related to the fact that /r l/ have the potential for syllabicity.[164] However, raising of middle vowels takes place also when *+dA* is repeatedly added to personal pronouns in *sin+di+dä* and *min+di+dä*. So this might be part of a more general process, which led to the general middle vowel raising of Modern Uygur. In SUK RH08 and 11 *nä+čä* appears as *ničä*.

The labial consonants round vowels in some cases in Orkhon Turkic, more so in Uygur and even more often in Qarakhanid. *amïl* 'gentle(ness), (marked by) spiritual peace', e.g., always appears as *amul* in the DLT and the QB and occasionally in Manichæan and Buddhist sources.[165] The second syllable of *yagmur* 'rain', must be such an instance, as *almïr* and other nouns show that they are derived with a

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tuprak+lag 'having earth' (18) and *yag+lag* 'oily' (19) and the adjective *agar* 'heavy' (12) < *agïr*. Also, however, the converb form *asn-ap* (17) 'hanging (a neckace) on oneself' which has no consonant causing such a shift and suggests the ms. must have been written by someone within the pre-classical spelling tradition.

[162] And not *tašïg*, because the second vowel of the first word is implicit; it has to be [a] and not [ï] because all other [ï]s of this text are spelled out explicitly.

[163] Ht VII 2051 should, however, better be read as *azkya tapïglïk tavar ïddïmïz* 'We have sent a little present *for* reverence'; not *'tapïglïg'* as read by the editor.

[164] Analogy from the common *munčulayu* could be the reason for the rounding of the vowel also with unrounded bases.

[165] *amal*, another Uygur variant, is caused by the process described above, whereby /ï/ is lowered to /a/ through the contiguity of /l/.

suffix of the shape *-mXr* (OTWF § 3.326). The process happens to second-syllable [ï, i] also in mss. written in the Sogdian script, e.g. in *avuč* < *avič*, the name of a hell, *amul* or *tap-ug* 'service'; *tapug* as well as *tapugčï* and *tapugsak* appear in the DLT as well, and hundreds of times in the QB. Elsewhere we find this process sporadically, e.g. in *kamuš* ‚reed' in the IrqB, in *säv-üg* as documented in OTWF 201-2[166] or in *tamdul-* 'to get ignited' < *tamït-ïl-* in Suv, BT XIII 39 and ETŞ. In *köpük* (IrqB XX and Heilk II 1,103) < *köpik* 'froth' and *köpür-* < *köpir-* 'to froth' (documented in OTWF 239-40) the rounding of the second syllable is caused more by the /p/ than by the first vowel. The rounding in the DLT's *yaprul-* could either come from the /p/ or be a reflex of the syncopated /U/. The DLT's *tap-uz-*, *tapuzgu* and *tapuzguk* 'riddle', *arvuš, čalpuš* and *kap-uš* in QB 6482 all get their /u/ from the labial consonant. The rounding in the last syllable of borrowed *karmaput* ≪ Skt. *karmapatha* and *čaxšaput* < Manichæan Sogdian *cxš'pδ* took place within Old Turkic. Uygur *tämir* 'iron' appears as *tämür* in MaitH XXV 2v11 or BT XIII 4,31; *Tämür* is a common proper name in late documents and was the base of Chinggis Khan's name *Temüjin*. The DLT also writes *tämür* and has *äm-üz-* 'to breastfeed' and *tamuz-* 'to drip' where Uygur has *ämiz-* and *tamïz-*. *tumlug* and *tumlïg* 'cold' are equally well attested from the earliest Uygur on but *tumlï-g* must clearly be the source. The name of the mythical mountain Sumeru is generally spelled as SWMYR in Uygur, which we transcribe as *sumer*. The rounded variant SWMWR in BT VIII can be read either as *sumur* or *sumor*.

While rounding by labial consonants is thus a wide-spread phenomenon in Turkic and borrowed stems as well as in derivational affixes, rounding in inflexional verbal suffixes including diathesis morphemes appears to be a dialect characteristic. We find *tilädümüz istädümüz* 'we wanted and searched' in HamTouHou 18,7, in a ms. written in Khotan; *+UmUz* and *-dUmUz* instead of normal *+(X)mXz* and *-dXmXz* is attested also in one ms. of the (Manichæan) Xw. *ünd[ädü]müz* is presumably to be read in r10 of the Manichæan ms. documented in WilkManKat nr. 170. In fragments written in Sogdian script, whose dialect is aberrant also in other respects, we have *tak+umuz* (251) instead of *takïmïz* and, with the preterit form which has the same suffixes, *sï-dumuz* (256) and *bačama-dumuz* (258); *kurtgardum* (600) 'I saved' instead of what is usually *-dXm*, *tapuntïlar*

[166] Sims-Williams 2000 reads the name of a Khaladj queen said to be a Turkic lady in a document from the year 711 as *Bilgä Sävüg*; the ms. has *bilgah savoh*; concerning the last syllable, note that the script does not distinguish between different rounded vowels.

(2) with the reflexive suffix which otherwise has the shape *-(X)n-* and the converb form *ämgänüp* (240) which otherwise ends in *-(X)p*. Such rounding is characteristic also for early Anatolian Turkish (as is the *+nUŋ* genitive mentioned in section 3.124).

We get first syllable rounding in *bin-* (Orkhon Turkic) 'to mount, to ride' > *min-* (IrqB) > *mün-* (Qarakhanid and other Uygur sources) and, as a prehistorical process, in *büt-* ‚to be completed' < **bit-* (still attested in Turkish) and *mU*, the question particle, < **mI.*[167] *mïntada*, a variant of *mun+ta+da* as well as *mïn+ča* and *mïn+tïn* (section 3.132) show that the oblique demonstrative stem *bun+* might originally have had the shape **bïn+* (unless these are two different stems). The first vowel of *bödi-* 'to dance' *may* have been rounded secondarily, to judge by Middle Turkic evidence mentioned in OTWF 184 and by some modern forms. The DLT has *möŋilä-* < *käŋilä-*. *bučgak* 'segment' (a.o. in *buluŋsuz bučgaksïz*, TT VI 427) presumably comes from *bïč-* 'to cut'. *bulït* 'cloud' comes from **bïlït*, as made likely by Yakut and Chuvash cognates; *bürgä* 'flea' is related to Ottoman *pire*. *murč* 'pepper' ultimately comes from Skt. *marica* 'pepper'; it lost its coda vowel in Middle Indic, its first vowel was then raised to *ï* by an Iranian intermediary and finally rounded in Uygur.

In the following examples vowel rounding takes place *before* the labial consonant: *sipir-* 'to sweep' (Manichæan) > *süpür-* (DLT etc.) can be compared to Mongolian *ši'ür-*, which shows rounding only in the second syllable. In *süvre* 'pointed' (Uygur and Qarakhanid), the rounding took place before our earliest texts; *sivri* is, however, attested in Western Oguz.[168] Cf. further the well-attested *tümä-* with derivates < *timä-* ‚to prepare', *čümgän* (BT III and DLT) < *čim+gän* 'meadow', *tomur-* 'to bleed' < **tam-ur-* and Uygur (also Manichæan) *yumšak* 'soft' < Orkhon Turkic *yïmšak*. Evidence for the hypothesis that *suv* 'water' comes from **sïv* is given in OTWF 177. Low vowels are affected in this way in *kövšäk* 'pliant, limp' (OTWF 236-7) < *kävšä-*, *kövrü* 'weak' in BT XIII 1,7 (convincingly shown to come from **käv-ür-*), *övgä* < *ev-* 'to hurry' in ZiemeSklav I 4 and *tövšä-* < *tävšä-* in the DLT. The vowel of *čom-* 'to submerge' may also be secondary in view of *čamgak* 'a big cooking pot' (BT XIII 5,77 and elsewhere). *töpö* 'hill'

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[167] This is the only shape of the particle attested in Early Ottoman, whereas Old Turkic /U/ otherwise corresponds to /U/ in Early Ottoman as well. Vowel rounding due to labial consonants is much weaker in Western Oguz than elsewhere.

[168] Sims-Williams 2000 proposed an Iranian etymology for this word, linking it to Avestan *suβrā-* and its cognates. This proposal seems to be compatible with the Turkic facts only if the rounding is secondary in the Iranian data as well.

presumably comes from **täpä*, attested in the whole of Oguz Turkic since early Ottoman. The possibility cannot be wholly dismissed that *täpä*, *bit-*, *mI*, *sivri,* Azeri *birä* or Middle Turkic (Codex Comanicus and Muqaddimatu ’l-Adab) *beyi-* ‘to dance’, none of which are attested in Old Turkic, could also be the result of an unrounding process; this could come from the fact that /ü ö/ do not exist in the Iranian languages with which the users of these variants were in contact. Such an explanation would not, however, cover instances such as *bulït, suv* and *kamuš*, and if /p v m/ caused rounding in back vowels there is no reason why they should not have rounded front vowels as well. There are enough front words, moreover, where the rounding takes place in the course of the development of Old Turkic (e.g. *čümgän*); the list above is by no means complete.[169]

The verb ‘to be born’ has the shape *tog-* ten times in the (older) BuddhKat but the shape *tug-* more than a dozen times in the (later) texts in Brāhmī writing. I would take the former to be the older form and the latter to be due to the labial raising influence of /g/.

Palatal consonants can front the vowel following them: We have fronting after the consonant cluster [ñč] in *koñčilärkä* in a runiform ms. (ThS I c 5) and in *ïnančläri* in Brāhmī script, in Maue 1996 nr. 29 B6 (spelled with *ñc*); cf. section 2.51. In Semitic writing systems such phenomena could be detected only if a velar consonant follows further on in the word or if the word is followed by the particle *Ok*. The /y/ was probably the reason for the fronting of the vowels in an Uygur variant of the adverb and conjunction *yana* to *yänä*, *yenä, ynä* ‘again; moreover’, which comes from Orkhon Turkic *yana*.[170] Among the Brāhmī instances, eight are spelled as *yenä*, *yinä* or *ynä*; the TT VIII instance spelled as *yñā* was by Clauson read with a back vowel, but the ñ may have been meant to indicate that the vowel was front.[171] The question of whether the synharmonism of this word was back or front can be determined where it is followed by *Ok*: In Uygur we find *yänä ök* e.g. in TT X 17 and 358 and DKPAMPb 275 but *yana ok* e.g. in BT XIII 4,29 or in Śāri 36.[172] In QB 643, 734, 3896, 3960, 4956, 5011,

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[169] It may happen, inversely, that rounded vowels change /ŋ/ to /m/: *kömüldürük* ‘breast strap of a saddle’ presumably comes from *köŋül*; Turkish has further examples for this phenomenon.

[170] Originally the vowel converb of *yan-* ‘to return’. Clauson (EDPT) ascribed the change to the influence of the particle *ymä*, which does indeed show *some* similarity to *yana* in both shape and meaning.

[171] Cf. *sön-ök* spelled as *söñok* in TT VIII M 21.

[172] Adam et al. 2000 nr. 1132.

6180 and 6343 the mss. fluctuate between *yana ok* and *yänä ök* with some preponderance of the former in the older mss. B and C; in 3889 Arat writes *yana ok* against all three of them. The occurences in DLT fols. 455 and 519 can be read either as *yana* or *yänä* in spite of the coda *alif*. The Middle Turkic and modern Turkic languages as listed in EDPT show both variants.

The change of *ayïn-* 'to fear' to *äyin-* documented in OTWF 591 may be due either to the presence of the sound sequence /yï/ or to the existence of *äymän-*, a verb with a meaning similar to *ayïn-* but hardly related to it etymologically; or it may have been caused both by the phonetic context and by the analogy. Where no *ï* > *i* change is involved, back/front fluctuation is not unheard of in Old Turkic, but is certainly rare. One example is *tiši sadrak* 'gappy toothed' in SP 21, whereas 'gappy' normally is *sädräk*. This is not a scribe's error, as we also have *iröksüz sadraksïz tiš* in MaitGeng 5 b 13 and the same phrase with *sädräksiz* in 11 b 18 of that same text section.[173]

In borrowings, the presence of /k/ tends to front surrounding vowels. This phenomenon (dealt with in Erdal 2002: 8-13) is relevant not only for comparing shapes which the lexemes have in the different languages but also for their shape within Uygur, as such words tend to fluctuate between front and back variants and sometimes to show a harmony discrepancy between the different syllables of the stem and between stems and suffixes. Such a case is the term probably pronounced as *šlok* or *šlök* (or *šulok*, *šülök* etc.), which signifies 'stanza, verse'. Other such cases are *užik* / *üžik* / *užïk* 'letter, character' and *čadik* / *čadïk* 'story about a previous life of Buddha' with coda /k/, *kümut* / *kumut* 'lotus' with onset /k/, *šaki* / *šakï* 'name of an Indian family' with medial /k/. That front spelling of /k/ does not necessarily determine the harmony class is proven by $n^1g^1ws^1k^2l^1r^1$ *nagošaklar* 'lay believers' in the runiform ms. TM 332 (KöktüTurf p.1047), which has front k^2 but back-harmony letters for the plural suffix. When the last stem syllable was front, harmony fluctuation in suffixes was still possible, as some scribes might treat the stem as foreign by consistently giving it back-harmony suffixation while some might adapt harmony to the stem.

2.403. Syncopation and stress

Medial vowels of stems outside the first syllable are often syncopated; here are a few among the innumerable examples: *agz+aŋïz+da* < *agïz+*

[173] *op-* 'to gulp down' and *öp-* 'to kiss, to sip a liquid' also look like variants and may even have been confused by speakers, but their similarity must be due to sound symbolism.

(Wettkampf 8 and 21), *ogul+um* > *ogl+um, bogz+ï, agz+ï* and *köŋl+i* (TT VIII I 1, 2 and 4 respectively), *orn+ïnta* (TT X 335), *adïr-* > *adr-ïl-* and *adr-ïp* (M III nr.33, 45,2$_4$), *tamït-ïl-* > *tamdul-*, *äšidil-* and *äšid-ür-* > *eštil-, eštür-*, *kat-ïl-ïš-* > *katlïš-, *igid-iš* > *igdiš, *ävir-iš* > *ävriš* or *älg+in* (accusative, 3rd pers. possessive) < *älig* 'hand' (e.g. Wettkampf 87; the subsequent simplification of the /lg/ cluster and metanalysis of the possessive suffix no doubt led to the variant äl found in some modern languages). *kïkïra alkïra* < *alakïr-a* (MaitH XXV 2v12) 'shouting' is an instance of /a/, a low vowel, getting syncopated. Outside the second syllable we have e.g. *yöläšr-üg* < *yöläšür-*. As shown by the petrified converb *yagru* (not *yaguru*, which would, in Orkhon Turkic spelling, have to be spelled with explicit vowel in the second syllable) < **yagu-r-u* of Orkhon Turkic, the coda vowel of stems could also get dropped if it got into medial position; the Orkhon inscriptions also have *yetrü* < **yet-ür-ü*. This should mean that the first and the last syllable of a word had some prominence over the others, or that medial vowels were not stressed. The unsyncopated forms often exist beside the syncopated ones, but this does not necessarily mean that usage fluctuated: It could also be that full forms persist for the consistent spelling of lexical and morphological units without consideration of the actual phonetic realization. The deletion of suffix-onset vowels not only after vowels but also after /r l/ is discussed in the next section. We just mentioned *yöläšr-üg* < *yöläšür-*; derivational suffixes are syncopated also in *tuytr-um* < *tuy-tur-*, *basrok* < *bas-ur-ok*, *äštrügli* (BT V 11,204) and *eštrüš-* (TT II,1 56) < *äšid-Ur-* and *iš küdg+üŋ* (TT I 119) < *iš küdüg* 'business'. *tark-* (Buddhist MaitH XV 10v22, Manichæan BT V 494) < *tar-ïk-, kork-* < *korï-k-* and *balk-* < *balïk-* are all formed with the formative *-(X)k-*. Compound voice suffixes such as *-tXz-, -lXn-, -tXl-* or *+gAr-* came about through syncopation of the vowel of their first elements, *-(X)t-, -(X)l-* and *+(X)k-*.

-tUr-U° becomes *-trU°* in *bertrürlär* < *ber-tür-ür-lär* (TT VI, main ms. against the edition) and *kayïntrup* < *kayïn-tur-* (TT VIII M 30, Brāhmī) and in fact already in Orkhon Turkic in the petrified converb *yantru* < *yan-tur-u* (KT N11). These are evidence for the tendency of the phoneme sequence /turu/ to get pronounced as [tru]. *äštrügli*, *eštrüš-* and *tuytrum*, which we just quoted, also show /tr/ starting a syllable. In an identical process, the suffix *+(l)dUrXk* gets pronounced as *+drUk* or *+trUk* in *sakaldruk* 'throat strap on a headstall' and *kömüldrüx* 'breast strap' in Wordlist 21 and *boyontrok* in TT VIII A. I do not recall having seen any clusters of three consonants beside instances of *°Ctr°* just

quoted; in all other cases syncopation takes place only when clusters of two consonants result from them.

The fact that syncopation is outright rare in inflexional suffixes does not necessarily mean that all inflexional suffixes must have been stressed; This could merely reflect the greater need for active morphemes to stay visibly recognizable in writing and audibly so in pronunciation than for what was or had become a syllable in a lexeme. Syncopation does take place under lexicalisation, as happened with *tolp* 'completely', which comes from the converb form *tol-up* (in M III nr.4 r11 still attested in this shape although already lexicalised). One would, on the other hand, assume that Old Turkic stress was not much different from that of modern languages: default stress on the word's last syllable, first syllable stress with the expressive adjective reduplication and with the pronominal stem *ka+*, pre-stressed verbal negation suffix *-mA-* and so forth. Adverbs could also have had first syllable stress; under this heading, the instrumental and equative suffixes, which were mainly in adverbial use, could have been unstressed. In BuddhKat 5 we find that the instrumental form of *(kü) kälig* 'magical appearance by metamorphosis' syncopates the second vowel to give *kälgin*; this could mean that instrumental forms stressed the first syllable (cf. Turkish *án+sızın* 'suddenly').

The *+lA-* derivate from *ogrï* is generally spelled as *ogurla-* in Uygur; in BuddhKat 11, which is written in Tibetan script, it is spelled as *ogrla-*, however, and Kāšġarī (fols. 152 and 159) states that the "common people" use this pronunciation (which he doesn't approve of). It appears that the coda vowel of the base was first syncopated, and that the cluster was then broken apart under the influence of rounding. As a rule, however, rounding assimilation appears as descriptively preceding syncopation: The rounded second vowel of *akruš* (documented in the UW entry), e.g., comes from the dropped second vowel of **akur-,* the base of *ak(u)ru* etc.; *šïšrun-* in BT XIII 12 comes from *sïš-ur-un-*, with the syncopated syllable contributing the rounding. The DLT's *savr-uk-* has its rounded vowel from the second, syncopated syllable of *savur-*. This practice changed in some cases: **ögir-inč* > *ögr-inč* only in M II 10,7, taken to be an early text for independent reasons; all other texts have *ögrünč*. In *ötlüm,* shown to come from *ötä-l-* in OTWF 293, syncopation must also have preceded the rounding effect. *ör-it-* 'to arouse' sometimes appears as *ört-*; when it does, we find *örtdüm* in U II 85,26 and *örtüp* in ETŞ 10,33 but the plural imperative *örtiŋ* in BT III 1105 (all three texts are late).

Coda /X/ appears to have gotten dropped prehistorically (as stated several times by Gerhard Doerfer). This happened also with a number of verb stems: *bar-* 'to go' (because its preterite form is spelled with D and not T in the inscriptions and because of its aorist vowel), *kör-* 'to see' (aorist vowel /ü/ and because of the /r/ in spite of the relationship with *köz* 'eye'), *kül-* 'to do' (because of *külï-k* 'character, behaviour' instead of the expected '*kül-ok*' and the aorist *külïr* in the early M I 8,9, normally replaced by *kïlur*), *siŋ-* 'to get imbibed etc.' (because of the causative *siŋir-* 'to swallow, digest' instead of the expected '*siŋ-ür-*'), *yay-* 'to shake, upset, put into disarray' (because of an attested variant *yayï-* and a derivate *yayï-k*) and *ay-* 'to say' (because of the aorist form *ayur* < **ayï-yur*).[174] There are, e.g., no suffixes ending with /X/ though there are many suffixes ending with /A/, /I/ or /U/. The noun *bod* 'tribe' may have dropped a coda /U/, if *bodun* 'people' is formed with the collective suffix *+(A)n*. The vowel could have been retained in the Mongolian cognate *boda*, Mongolian /A/ corresponding to Turkic /U/ (whereas Mongolian /U/ corresponds to Turkic /X/).

2.404. Consonant distribution

Old Turkic had no limitation at all on phonemes which could appear at the end of syllables and words (as against Mandarin Chinese, e.g., which allows only vowels, *n*, *r* and *ŋ*). Nor is there any indication that consonants were devoiced in coda position, the only exception being *-mAs*, the Qarakhanid variant of *-mAz*. We also have *yanmas yer* 'the place of no return' in M III nr.16 v 3.[175] *-mAs* may therefore have been a dialect variant of the negative aorist suffix.

The only voiced consonants regularly appearing in the word onset in genuine Turkic words are [y] and [b], presumably belonging to the phoneme /v/. In addition, there are two or three words starting with nasals: /n/ in *nä* 'what' together with its numerous case forms which sometimes deserve their own dictionary entries, and in *näŋ* ‚thing; (not) at all' (possibly also coming from *nä*); /m/ in *mU* (the clitic particle for yes/no questions). Furthermore, *b* consistently becomes *m* in post-inscriptional Old Turkic (including runiform mss., where we find *mončuk* 'bead') when the following consonant is a nasal, e.g. in *bïŋ* > *mïŋ* 'thousand'. The process leading to this sound change is just at its

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[174] *kïyï-* 'to hew, fell' and **sezi-* 'to have a suspicion or hunch' also become *kïy-* and *sez-* starting with Qarakhanid, and note *kïyï-k* 'something cut obliquely' and *sezi-k* 'doubt' with the suffix *-(O)k*.

[175] Not an instance of voice confusion, as this is an archaic text lacking the phenomenon; nor does Qarakhanid have voice confusion.

beginning in the language of the runiform inscriptions, where *bän* 'I' > *män* when placed after verb forms. In this position one could argue, however, that the pronoun was on its way to becoming a suffix or at least a clitic; that *b* / *m* was not, in other words, in truly onset position.[176] Although #m° < #b° is attested only in Uygur, the process clearly took place when /ñ/ had not yet become /y/: Otherwise words with /ñ/ in the second syllable, such as *meyi* 'brain' < **bäñi*, would not have been involved (see the end of section 2.33).

Since there was no phonemic voice opposition in the onset, the actual pronunciation of onset stops may actually have varied freely; i.e. onset /t/ may, on occasion have been pronounced quite softly or onset /b/ may have lost its voice, making them sound more like /d/ and /p/ respectively.[177] When we find that Castren in the middle of the 19th century noted a number of Karagass (= Tofa) words with /d/ in the onset[178] which all have onset /d/ in Turkmen as well, we can well conclude that Proto-Turkic too allowed these sound to appear in these words. They could *possibly* have had a voiced (or weak) onset also in some variants of Old Turkic, e.g. in Orkhon Turkic. Copies from foreign sources such as *darni* 'incantation', *dyan* 'meditation' or *dentar* 'elect' were spelled with onset D, presumably pronounced as [d]. The spelling *tarni* which we find in Fedakâr 251 probably reflects this same pronunciation, the T aiming to exclude the pronunciation [δ].

The only voiceless consonant phonemes which did not appear in onset position in Turkic words are /p/ and /š/. This is the situation in runiform sources and in the Uygur-Khotanese word list (where Khotanese terms do appear with onset *p*). Nothing can actually be said concerning onset /p/ in texts in Uygur and Sogdian writing, as *b* and *p* are there expressed by the same letter. In sources in Manichæan writing the onset /p/ of borrowed elements is retained: Zieme 1969: 59 has them listed.[179] A fluctuation *bušï* (4 times in M III Nrs. 11 and 12) vs. *pušï* (5 times in

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[176] Another possibility is that onset **#m°* prehistorically became *#b°* except where it was protected by a following nasal. It is, at present, difficult to chose between these logically equivalent possibilities.

[177] *de-* 'to say' is widespread even among Turkic languages which otherwise do not have onset /d/, including Old Turkic texts not showing voice confusion (e.g. twice in the fragments in Sogdian script); the reason may have been clitic-like distribution, this verb being exclusively used after quoted strings.

[178] *dag* 'mountain', *dara-* 'to comb', *dayak* 'staff', *demer* 'iron', *der* 'sweat', *dèl* 'tongue', *dirig* 'alive', *dîr* 'he says', *dîš* 'tooth', *dolo* 'full', *döiš* 'breast', *dûn* 'yesterday' or *düp* 'ground'.

[179] *baškok* (no doubt to be interpreted as *bašgok*; the text has numerous confusions among velars) has nothing to do with *pašik* ‚hymn', as stated there; see OTWF 158-9.

Xw) for Chinese *pu shi* ‚alms‘ may either be a sign of adaptation to the Uygur distribution of labials (seeing that this was a term in common use among all Uygur societies) or reflect uncertainty concerning the pronunciation of Chinese /p/ (now spelled as *b* in *pinyin* and distinct from *p*, the latter spelled as *p‘* in the Wade-Giles system). It is worth mentioning that sources in Manichæan writing show a small number of onset *p*s also in original Turkic words: The Pothi Book (which is relatively late as Manichæan texts go) has the greatest number, with *pat-ïl-* ‘to get submerged’, *pïšr-un-* ‘to assimilate’, *pük-ün-* ‘to recognize’, *püt-ür-* (thrice) ‘to finish’, *pag* ‘bond’ and *pakïr* ‘copper’. We also have *par-* ‚to go‘ in Xw, *p(ä)k* ‚strong(ly)‘ in M III nr. 5 r 8, *pärkä* ‚whip‘ and the problematic *perkäsä-* in M II 13_9. No lexically significant opposition b : p becomes apparent here; these rather seem to be accidental fluctuations. Sources in Tibetan writing excerpted in Clauson, 1962: 98 spell the words *bars* (which could be a borrowing), *baglïg* and *bašlagïnï* with *p*, but in (the early) BuddhKat there is no onset *p* in Turkic words (though there are numerous instances of *paramid* < *pāramitā* ‘excellence’ and *burxan* spelled with *p*). In Brāhmī sources there is a clear preference for *p* in the word onset.[180] Borrowings are generally spelled in the way which is the correct one from the point of view of the source language; there are hardly any exceptions, even with such a much used term as *bodisatv* / *bodisavt* / *bodisavït.*[181] The prevalence of *p* in the onset of Turkic words in later texts as against its great rarity in early texts might be due to the influence of the Uygur script on the spelling: The Uygur letter transcribed as *b* is in fact a Semitic *pē*. That any phonetic significance should be ascribed to this spelling is not very likely; runiform writing

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[180] *ba-, bag, balïk, bark, basa, basutčï, bat-, bäg, bäkiz, bäliŋlä-, bä(r)k, bäzä-, bečin, bel, bï, biti-, biz, bodol-, boyun, bödigči, bört-, böz, bugday, buka, bulït, buk, burčak, burkï, burnač, busan-, buš-, buyruk, buz, buz-, buzagu, bürünčük* and their derivates are consistently spelled with *p*, while *bar, bar-, baš, bälgü, bärü, ber-, beš, bïš-, bil-, bir, bo, bol-, bošgut, böl-, budïk, bul-, bulgan-, buluŋ, burxan* (in one instance merely *bur*, which is the form of the term *buddha* as borrowed or reborrowed from Chinese; *xan* is a Turkic addition), *büt-* and their derivates fluctuate between *b* or *bh* and *p*. Only *buz* (‘passion’) is spelled exclusively with *b,* while *bars, bayagut, baz, bägni, bogz+ï, bor, bošo-, boyn+ï, bukač* and *bukagu* are spelled with *bh*, there being only one example of each (two of *bayagut*).

[181] I think editors should spell borrowed words with onset *p* and not *b* if they have *p* in the source language, as e.g. *patïr* ‘bowl’, which I have not found in any text in an Indic script; it comes from Skt. *pātra* and lacks the final vowel also in the Khotanese word spelled as *pāttarä*.

exclusively uses *b* in this position.[182] The absence of Proto-Turkic onset */p/ has been accounted for by the hypothesis that it changed to **h*- (which was then also dropped from most of the Turkic languages but not, e.g., Khaladj). This idea, propounded by Poppe, Doerfer and perhaps others, is based on evidence from other Altaic languages (in particular the correspondence with Tunguz *f*). At any rate it explains why **h* is found only at the beginning of words.[183] One voiced consonant phone which *is* used in the word onset is [b]; for the sake of rule simplicity, one could consider assigning this to the phoneme /p/ as far as Old Turkic is concerned: It is spelled with *p* in the Uygur – though not in the Manichæan and runiform – scripts and sometimes also in Brāhmī. /v/ does not generally appear as [b] even after /r l n/, so that there would be no overlapping of allophones. Each row in the table of consonants would, in onset position, be represented by the column most to the left, then, if occupied at all. Through the influx of foreign words, there also emerged a stop : fricative opposition in the onset, when words such as *vačïr* 'diamond', *vinay* 'the rules of discipline' or *višay* 'the scope or reach of the sense organs' were introduced.

The original absence of /š/ in onset position can be explained through the hypothesis that it comes either from a Proto-Turkic palatal lateral (*/λ/) or from the cluster **lč*;[184] /l/ did not appear in the word onset either. Regressive assimilation is a secondary source for *š*°: Words such as *säš*- ‚to disentangle', *sïš* ‚skewer' and *saš*- ‚to be perplexed, confused' sometimes alter their /s/ to /š/ under influence of the second sibilant; we have *šaš-ok, šašurmadïn* and *šašutsuz* attested. The sibilants of *šašmaksïz* (BT XIII 12,38) and *šašïmsïz* (ETŞ 11,146) on the one hand and *sašïmsïz* (BT XIII 60,1 and ETŞ 9,31) on the other are all supported by rote-rhyme (which has quite strict rules), showing that the speaker could freely choose between the variant with /s/ and the one with /š/ under poetic license. The appearance of *šïšrun*- < *sïšrun*- discussed in OTWF 614 is also related to rote-rhyme. *šïčgan* in Maue

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[182] The fact that Qarakhanid sources also always have *bā* does not, of course, mean anything, as the original Arabic writing system (used by Qarakhanid authors) did not have any *p* (and did not need any, as Arabic does not have this sound).

[183] This distribution does not really need an explanation, seeing that it is relatively common among the world's languages. Practically all of the instances of Tunguz *f* adduced for such comparisons appear before a labial vowel, so that /h/ may actually have been the original sound and its labialisation in Tunguz secondary.

[184] Cf. Volga Bolgarian *balč* for Common Turkic *baš* ‚head' (Erdal 1993: 107-9 and 122 and T.Tekin 1997), Mongolian *eljigen* for Common Turkic *äšgäk* 'donkey' (Khaladj *äšgä*) and so forth. Classical Mongolian [š] is an allophone of /s/; it had no phoneme /š/ and all Mongolic cognates of Turkic /š/ involve an /l/.

1996 nr. 3,36 (Brāhmī script; meaning supported by a Tibetan parallel) < *sïčgan* 'mouse' is a similar case of assimilation. Regressive assimilation of /s/ to /š/ is not limited to onset position, as shown by *küšüš* < *küsüš* 'wish' in TT IX 116 (in Manichæan script, where the two letters have a quite different shape).

There seems to have been no problem to introduce onset /š/ with borrowings, in view of the appearance of the title *šad* already in the runiform inscriptions and the widespread use of *šïmnu* / *šamnu* to refer to the ‚devil' (also among Buddhists; there = *māra*). Cf. also the term *šïk* for a measure of capacity, borrowed from Chinese. Note, though, that *šad* appears as *čad* in Taryat N4 (twice) and Tes W6, two runiform inscriptions of the Uygur steppe empire. *šato* ‚ladder' is also a borrowing and was, in any case, adapted to Turkic in the form of *č(a)to* in an early text (M I nr. 1 III v 8); Wordlist has it with this meaning and *o* in the second syllable. If we do find *šato* itself well attested in classical and later texts (including Qarakhanid), the reason may be that the Turks subsequently got used to having *š* in onset position. The replacement of an onset foreign sibilant by /č/ appears to have been an areal phenomenon: *čïxšaput* / *čaxšapat* (etc.) 'commandment' is not a direct loan from Skt. *śikṣāpada* but comes over Sogdian *čyš'pδ*. The history of *šï:* 'moist(ure)' (found e.g. in BuddhKat 4) may have been a bit more complicated.[185]

Onset *č* and *š* can alternate also in onomatopoeics: *čogurt* (ETŞ 8,13) alternates with *šogïrt* (BT III 233-4, read as *sogïrt* by the editor), *čagïla-* appears as *jagïla-* and *šagïla-* in the DLT. The opposite process takes place after consonants: The DLT replaces *š* by *č* when they get into syllable onset position after consonants, in *kik-š-ür-* > *kikčür-, yap-š-ur-* > *yapčur-* and *tap-š-ur-* > *tapčur-; kökšin* 'greenish, bluish' becomes *kökčin* in the QB (six examples). The DLT's *kïrča-* 'to scrape' (with *kïrčal-* 'to get wounded') comes from **kïr-ïš+a-* (cf. Uygur *kïršal-*). After /t/ this happens even in Uygur: *tutšï* 'continuous', syncopated from **tut-uš-ï*, often becomes *tutčï* (examples in OTWF 343), in the QB even spelled as *tučï* when demanded by the metre. Cf. also *katčïgsïzïn* 'without any admixture' (Bhadrācāryā ap. Stabreimtexte 145), from *kat-ïš-* 'to mix', again with the vowel of the formative syncopated.

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[185] The modern Chinese word of this shape and meaning originally had a final consonant which should have been borrowed into Old Turkic; what we have appears to have resulted from contamination between that word and Turkic *čï:* 'dew' etc., attested (together with verbal derivates) in the DLT and in many modern languages.

mïr ‚honey‘, *men* ‘flour’, *maŋal* ‘luck etc.’, *mahabut* ‘element’, *madar* ‘monster’ and *murut* ‘pear’ are examples for loan words starting with /m/; in Turkic words in Uygur texts, onset /m/ appears also when the following consonant is a nasal (e.g. *mäŋiz* ‘complexion’) or when it was a nasal prehistorically (e.g. *meyi* ‘brain’ < **bäñi*). *nom* ‚ethics; treatise, text‘, *nirvan* ‘nirvāṇa’, *noš* ‘elixir’, *nïpur* ‘foot jewellery’ or *nizvanï* = Skt. *kleśa* show onset /n/. *nayrag* ‘characteristic mark of Buddha’ may be an early loan from Mongolic, which also has a related verb *naira-*; this noun is attested already in the Mait. *ïnaru* ‘forward, onward’ lost its onset vowel in Qarakhanid, appearing as *naru* both in the DLT and the QB; by that time, onset /n/ appears to have become acceptable for common pronunciation. At least some variants of Old Turkic may have had (free or conditioned) alternation between the pronunciations of /l/ and /n/ in onset position, seeing that they are considered equivalent for the rote rhyme in stanza 18 of the alphabetical verse starting in ETŞ p. 106. The BuddhKat text in Tibetan script writes thrice *lom* for *nom* ‘teaching’; the editor’s note thereto mentions that the old name of *Lop* in *Lop noor* in Xinjiang was *Nop*. Old Turkic *lačïn* ‚falcon‘ appears in Mongolian as *način*; the latter may be the source of the word, since onset /n/ was normal for originally Mongolic stems. *lom* and *lačïn* could both have resulted from nasal dissimilation, as found in (Mongolic) Dagur, which also has *lom*.[186] *Lop* cannot be explained in this way, however, nor can Mongol *naγaču* > *laggač* ‘male relative on mother’s side’ (Tachi 96). The common Turkic plural suffix *+lAr* is no doubt related to its Mongol synonym *+nAr*; it also shows /l/ where the latter has /n/.

A word starting with /l/ and retaining it in onset position is attested already in Orkhon Turkic: In BQ S10 we find *lagzïn* ‚pork‘. *lu* ‚dragon‘, *lenxwa* ‚lotus‘, *lim* ‚pillar, beam‘, *labay* ‚a shell; a pumpkin; a musical instrument‘ *lurzï* ‘stick, club’ or *lačïn* ‘falcon’ are terms found in Uygur not linked to any religious system; the terms starting with /l/ borrowed in religious contexts are, of course, much more numerous. *la+la-* ‘to slash, cut in stripes’ is derived from a Chinese term using the formative *+lA-*.

/r/ is hardly ever attested in onset position; one example is *ražav(ï)rt* ‘lapis lazuli’, which comes from Sanskrit *rājāvarta*. *rakšas* ‘female demon’ would be another example.

The main strategy for getting rid of unusual onset consonants of loans was to put a vowel before them, usually the same as the one following

[186] Cf. e.g. Spanish *alma* < Latin *anima*.

them. Thus commonly with borrowings with /r/ in the onset, e.g. in *aram ay*, the name of the first month in the Indian year, ≪ Skt. *rāma*, *orohit(a)k* ≪ Skt. *rohita(ka)*, the name of a devout fish (U IV D 119 and a fragment in the note thereto), *ärdini* ‚jewel' ≪ Skt. *ratna* (still attested as *rtni* / *rdni* / *rddni* 12 times in Manichæan texts), *orohini*, the name of a constellation, ≪ *rohiṇī, arsayan* (U 57 + 259, part II v title; Wilkens 24) as variant of *rasayan* ≪ *rasāyana,* or *arżï* ‚a holy man' ≪ Skt. *ṛṣi.* See the UW for the shape of this latter (spelled with onset R at least in two instances in Uygur Brāhmī and not given an onset *alef* in Sogdian). Cf. *araxu* 'the planet Rāhu' in BT III 162, *urum* 'Byzantium, i.e. Eastern Rome' in BT III 1036 and elsewhere. In the dialect of the Uygur steppe empire the same happened with onset /l/: *lu* 'dragon' appears as *ulu* in Tariat W 2. The common binome *öl šï* 'moisture, wetness' appears as *öl ïšï* (or perhaps with secondary fronting as *öl iši*) in Erleuch 10.[187] Foreign words with an onset /z/ or /ž/ also receive a vowel before that: *z(ä)rwa* is still attested in a ms. in Sogdian script but appears as *äzrwa* everywhere else; the astrological term *žim* is attested in TT VIII as *äžim*.

Another way to get rid of unusual onset consonants was to drop them, as with /r/ in *akšazlar* 'the *rākṣasas*' (DhāSū 15), *awrap* << Skt. *raurava* (Maitr 83r22 and 23) and *ačagarx* 'Rājagṛha' in ETŞ 19,4; the pronunciation of the latter is secured by its alliterating with several words all starting with /a/. /l/ could get dropped in the same way: Two examples of *ala-* < *la+la-* 'to slash' (see above) are mentioned in OTWF 441.

2.405. Consonant clusters and their resolution

Old Turkic originally had no consonant clusters at the beginnings of words, affixes or even syllables. In Uygur we find onset consonant clusters in borrowed words such as *frišti* ‚angel', *pra* ‚canopy', *kšan* ‚a moment', *trižul* 'trident', *dyan* 'meditation', *tsun* 'inch', *psak* 'wreath, garland', *stup* 'Buddhist sanctuary' or *tsuy* 'sin'. Clusters in the onset of syllables, as in the second syllable of *lenxwa* 'lotus', are against the rules of native Turkic but are never spelled in any other way.[188] We may not be sure exactly how these were actually pronounced, as their spelling must have been traditional; it usually followed that of the giver

[187] The binome (and not just *ïšï* / *iši* by itself, as translated by the editor) here appears to be a euphemism for 'urine'. To connect this *iši* to Turkish *işe-* 'to urinate' does not imply disconnecting it from *šï*; I take the Turkish verb to be secondary.

[188] The second part of the Mongol (Secret History) female proper name *Alan Гоа* no doubt represents the same source.

language, but this statement makes no sense when one thinks of Chinese, the source of *lenxwa*. Note, on the other hand, spellings such as *piret* '*preta*, a demon' e.g. in MaitH XV 4r5 or 5r18, *kišan* in DKPAMPb 1053 or *girant* (Abhi A 3095), ultimately from Sanskrit *grantha* 'a treatise, section'. Auxiliary vowels as in *anantïrïš* 'one of a set of grave sins', *ardïr* 'a moon station', *šastïr* 'doctrinal text', *patïr* 'leaf', *vačïr* 'thunderbolt; diamond' or *apïramanï* 'quality which a *bodhisattva* has incommensurately' should in principle be transcribed to accord with vowel harmony, since they get introduced in Turkic and not in the source language; some of them alternate with *alef* more than they would do if they had a front pronunciation.[189] For *šlok* ‚verse' we have variants like *šulok* and *šülök* (first vowel possibly to be pronounced as [ö]), which are assimilated to Turkic pronunciation. Clusters in the syllable onset of foreign words are often broken apart by high vowels, especially in late texts; e.g. *may tri* → *may ti ri*. We even find such phenomena in Turkic words, e.g. *titirä-* for *titrä-* 'to tremble' (Candrasūtra IIe5); dividing that into the syllables *tit* and *rä* would place /r/ into syllable onset, which is, in Old Turkic, also avoided where possible. Occasionally there is a low vowel, as in *taržul* 'trident' < *trižul* (Scripture of the ten kings, the 2nd court).

dyan 'meditation' is, however, spelled as a monosyllable 14 times in Brāhmī texts, presumably reflecting the real pronunciation of the scribes. We should also remember that *dyan* has survived unchanged to this day (in Altay Turkic).

Chinese onset [ts] (and perhaps [dz]) are often simplified to [s] (and [z]); e.g. in *saŋ* 'barn' which appears beside the more common *tsaŋ*. Similarly *tsuy* 'sin' became *suy* in Xw 218, 219 and 221, an early text; see Shōgaito 1986 (1987): 128 ff. and the note to Ht VIII 389 for further examples.

Another process was for the cluster to get preceded by a vowel, as in *astup* '*stūpa*' (Suv 627,20) or *ästiramati* ~ *isdiramati* (frequently in Abhi) < Skt. *sthiramati*.

In words of Turkic origin onset clusters came up secondarily: In section 2.403 we discussed the cluster *tr*°, which comes either from a syncopation of the sequence /turu/ or from the introduction of an intrusive /t/ to break up clusters like /lr/. The diminutive suffix *+kIyA*, < *+kIñA* (still appearing as *+kinyä* in an early Uygur text, M I 23,32) is practically always spelled as *+kyA* in Uygur, with an onset cluster. This includes some but not all Brāhmī instances; *azkïya* is spelled in three

[189] Cf. Erdal 2002: 19-20.

syllables in Maue 1996 4,75 and 95, *oglankïya* in four syllables in Maue 21 nr. 109. Moreover, as pointed out in UW 155b under *antakï(y)a ok*, a bisyllabic pronunciation of the suffix is called for also in the Prajñāpāramitāstotra published in the ETŞ because of the very regular verse.[190]

Note, further, the particle spelled as *ymä* in all Uygur scripts, also in the dozens of examples in Brāhmī (where spellings of Turkic words seem to be especially close to pronunciation). The absence of an explicit vowel in the instances of this particle appearing in runiform script cannot, however, mean that there was no vowel in the inscriptions in this position, and T.Tekin 1968: 170 (and elsewhere) might well be right in spelling the word as *yämä*; he considers it to have originally been a converb and provides it with an Altaic etymology. In Qarakhanid (examples quoted in the EDPT) the word is spelled as a bisyllable (though the occasional spelling with *e* is likely to be due to the secondary influence of the /y/). For Uygur, however, the possibility of pronunciation with an onset cluster appears to have been a fact; this cluster proved to be unstable in the long run, *ymä* turning into clitic *mA* with synharmonism.

The sound change witnessed in *ymä* is not limited to that particle but appears to have been responsible for a number of variants which we find in Brāhmī sources: It can be formulated as #yVCV° > #yCV°, and apparently consists in the /y/ (often) becoming syllabic. One example for it is *yge* in *ršïlarda yge* 'the best among the wise' in TT VIII D 6. We have dozens of Brāhmī examples of *yeg* 'better, best' spelled *with* a vowel, but when the 3rd person possessive suffix (here with the assimilation [i > e] because of the /e/ in the first syllable) gets added, this stem vowel gets syncopated. We find that all vowels can sporadically get dropped, in words such as *yaŋï* 'first decade of the month', *yara-gay, yaral-mïš, yarašï, yaratïg, yaratïl-, yaratïn-, yegirmi, yeti* ('seven' > *yete*) and *yeti+nč*, *yïg-ïp, yïgïl-, yïgïn-, yïgač, yïlan, yil-ip, yevig, yenä* 'again', *yürüŋ* 'light coloured, white'. *yegirmi* 'twenty' is spelled without its first vowel in all 8 of its Brāhmī instances; we know that it was /e/ firstly because of the fluctuation *i* ~ Ø appearing in this word in the Orkhon sources, and secondly because assimilation makes its second vowel turn up as *e* in most of the Brāhmī instances

[190] Röhrborn thinks the fact that the final *alef* is written separately would also speak for a bisyllabic pronunciation; this spelling (found also in *aya* 'palm of the hand') probably intends to preclude a reading as *+kIn*.

(and its third turn up as *e* in nearly half of them).[191] Cf. also spellings like YGRMYYH in Manichæan script in M III nr. 22 r 1 or YGRMYNC in Uygur writing in M I 15,16, or YR'T- for *yarat-* in M I 14-15,5, 8, 10, 13,17 and the like.[192] The fact that *yïmšak* 'soft' in KT S 5 and 6 and BQ twice N 4, *yinčü* 'pearl' in KT S 3 and BQ N 3, *yïr* 'north' in KT E 34 and BQ N 3 and *yïpar* 'scent' in BQ S 11 are all spelled without vowel in the first syllable (and with y^2 instead of y^1) is, I am convinced, an indication that this vowel was dropped in Orkhon Turkic: These are the only instances in these two inscriptions where a non-expressed first-syllable vowel is not /a/ or /ä/ (whereas the relevant rule appears to have been applied slightly more laxly in the other Orkhon inscriptions). If we find a spelling like YΓYLM'Q in TT IX 117, we are entitled to assume that the vowel of the first syllable of *yïgïl-* was reduced if not dropped; the ms. otherwise shows only the usual spellings without vowel, which are merely graphic.

Section 2.34 describes an alternation #yV° ~ #V°, stated to be a reflex of **h*, a phoneme appearing in Proto-Turkic at the beginning of words. In a few unclear cases[193] an unstable #yV° may not be the reflex of such an */h/, the vowel following it being different in the alternants: BQ E31 writes *yïlpagut* where the parallel text in KT N7 can be read as *alpagut* 'warrior'. Cf. also the variants *ïmrak* (TT X 346), *yamrak* (KP 16,3)[194] and *y(ï)mrak* (HandschrReste II 75 and M III text 22, $39,2_3$) of *amrak* 'dear'. The relationship between *yaltrï-* 'to gleam, glimmer' and it variants (OTWF 482) and various forms like *yïltïra-*, *yïltïr-* and *yïltrïk* ('gleam', QB) may be either a phonetic or a synesthetic one. There also is a verb *yïčan-* ~ *ïčan-* ~ *yačan-* discussed in OTWF 600-601. Orkhon Turkic and Uygur *ïgač* 'tree' appears as *yïgač* in Qarakhanid.

Phonotactic rules allow no vowel sequences in Old Turkic words of Turkic origin.[195] We do, however, find a sequence spelled W' in

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[191] The DLT has *yegirmä* as main entry and *yegirmi* as 'variant'. Three among its four instances are not vocalised in the first syllable; in the fourth a *fatḥa* was crossed out by a second hand and replaced by a *kasra*.

[192] To judge by some spelling statistics, high vowels may have more readily gotten syncopated than low vowels: *yegirmi* appears to get spelled more often without vowel than *yarat-*.

[193] Unclear also because they are so few compared with the normal spelling.

[194] Thus the UW entry with question mark, while Hamilton simply writes ''MR'X; to me it looks like a Y corrected to an *alef*.

[195] In one ms. in Sogdian writing (Vimala 1070), we once find the postposition *eyin* spelled as 'Y'YN, which might have been meant to be read as (bisyllabic) *e'in*. This is not sufficient evidence to assume the existence of a medial glottal stop in Old Turkic; it might be a mere error or a matter of spelling.

borrowings such as *lenxwa* ‚lotus‘ and *äzrwa*, the name of a Manichæan and of a Buddhist deity; these are exceptions both to this rule and to synharmonism. These words contain an abnormal vowel sequence if they were pronounced as *len–xu–a* and *äz–ru–a*. If *xwa* in the name of the flower consisted of one syllable (as in Chinese, the source language), it would constitute a violation of the Turkic rule which bars consonant clusters in the syllable onset; but then there are quite a number of borrowings with onset cluster in our sources. One possibility is to read *len–xu–wa*, as a consonant *w* is found also in other loans. See Maue 1996: XXVI-XXVII for how the question was dealt with in texts in Brāhmī writing.

Clusters of three consonants always involve one of the sonants /l n r/. Examples are the stems *yaltrï-* and *yultrï-* (both spelled with *dāl* – not *dhāl* – in the DLT), *koltgula-, adïrtla-, körünčlä-, tančgala-, tärklä-* and *tärtrü*. In the clusters of *amïrtgur-* and *körtgür-* the /t/ is secondary.

Originally consonant clusters were permitted only at the end of syllables or across syllable borders. The possibilities for syllable-closing clusters are, in Turkic words, limited to *nt* (e.g. *ant* ‘oath’), *rt* (e.g. *art* ‘mountain pass’), *lt* (e.g. *tölt* ‘pillow’[196]), *rp* (e.g. *sarp* ‘steep’), *lp* (e.g. *alp* ‚heroic; difficult’), *rk* (e.g. *ärk* ‘power’), *lk* (e.g. *alk-* ‘to destroy’), *nč* (e.g. *känč* ‘baby’), *rč* (e.g. *yurč* ‘brother-in-law’) and *rs* (e.g. *tärs* ‘awry; misguided’). Note that the first element in all of these clusters is /r/, /l/ or /n/.[197] These are the ‘sonants’, after which /d/ and /g/ (when followed by vowels) appear in their stop and not their fricative variant; at the coda after /l n r/ we only find voiceless consonants. Before the syllable border /n/ is followed only by /t/ or /č/, with which it shares its point of articulation.[198] Additional clusters found in loans into Uygur may accord only with one of these two limitations, e.g. in *lešp* ‘phlegm’ or *bodisavt,* or with none, as in *bodisatv* ‘*bodhisattva*’; but the last mentioned might have been pronounced as *bodisatf*. The DLT quotes *leš* ‘phlegm’ from the Čigil dialect, which means that that dialect, at any rate, assimilated it to Turkic phonotactics; *lešip* in the Suv and elsewhere shows another way of coming to terms with the

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[196] See OTWF 425 for the shape of this noun. I know of no Old Turkic examples for final /lč/.

[197] *üst* or *ast*, which appear in the EDPT, do not exist in Old Turkic; they are misrepresentations of *üstün* and *astïn*, formed with the orientational formative *+dXn* (with assimilation). *üsk* ‘presence’ is a relational noun apparently always followed by a vowel.

[198] In Uygur (and Middle Turkic) *üsk* ‘presence’ the first element is not a sonant, but this word is always used with possessive suffix; i.e. /sk/ never appears in phonetically final position. In late texts, *üskintä* often undergoes metathesis to give *üksintä*.

irregularity. Concerning the term for '*bodhisattva*' (which had already lost its coda vowel before it reached Turkic), the variant *bodisavt* already represents movement toward Turkic rules, as it is the second and not the first consonant that is voiceless; eventually the word got fully assimilated either by dropping the alveolar or by introducing a vowel between the two final consonants. Such vowels sometimes appear even in 'normal' Old Turkic clusters, leading to fluctuations such as *elt-* ~ *elit-* 'to lead' or, in late texts, *bürit-* beside *bürt-* 'to touch'.[199] The limitation that the second consonant of Turkic coda clusters had to be voiceless meant that the formative *-(O)k* could drop its onset vowel after stems ending in /r/ in words such as *kör-k* 'shape', *ör-k* and *tur-k* 'length, height' whereas *-(X)g* couldn't: Cf. *sor-ug, sür-üg, tur-ug, ur-ug* and *yör-üg*. The formative *-(X)nč* appears to come from the morpheme sequence *-(X)n-(X)š* after the second formative lost its vowel and would have given the impossible cluster **nš*; cf. OTWF 275-277.

The word for 'sheep', originally *koñ*, is in Uygur generally spelled as *koyn*. In MaitH XX 13r29 the editors write '*koy(u)n*', presumably thinking that the word had two syllables; that is unlikely because no second vowel appears in any of the rather numerous instances. For a similar reason it is also unlikely that (as Doerfer 1993: 129 thought) it was an archaic spelling for what had already become /y/. Nor is it very likely that there should have been a coda cluster consisting of the consonants /y/ and /n/ as there is a voiceless consonant as second element in all such clusters. The spelling YN could have been meant to indicate retained [ñ] or nasalised *y*, but then the question is why this sound should have been retained throughout Uygur in this word and not in others which also had /ñ/ in the coda.

Across syllable borders there are very much more possibilities for having consonant sequences, though not everything is possible; evidence is listed in Clauson 1962: 169. Even in this position, clusters occasionally get simplified; *tisilär* for *titsi+lär* 'students' in BT V 13 or *taysï* for *taytsï* in Ht VII 967 must be phonetic spellings;[200] BT V 13 also shows *tt* > *t* and *kk* > *k* even across morpheme boundaries.

/ŋ/ was quite possible in the beginning of syllables, e.g. in *orŋut* 'flag; general' and *orŋut* 'general', *közŋü* 'mirror' or *yalŋuk* 'human being' (<

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[199] Alternately, *elt-* could have been syncopated from *elit-*, and *bürit-* could have come about because the verb was re-interpreted as an *–(X)t-* causative (which had the shape *-(I)t-* in late texts).

[200] The latter is called "falsch" by the editor, who apparently expected Uygur and Chinese phonetics to be identical.

yalïŋ+u- with syncopation). Scholars have generally not trusted the mss. in this matter, emending to *or(u)ŋut* (very often), *yal(a)ŋuk* (e.g. in MaitH XX 13r16) or *köz(ü)ŋü* (e.g. in DreiPrinz 57). Later Uygur did introduce helping vowels here (see next paragraph), but there is no reason to assume that all speakers did so or that this was an early phenomenon. The shorter forms are actually attested more often and are highly likely to be the original ones.

In relatively late texts medial clusters, especially ones involving /r/, secondarily get broken up by 'helping' vowels; e.g. *ödräk* ‚duck' > *ödiräk, sädiräk* (ETŞ 12,8, UigTot 918) < *sädräk* ‚sparse', *otïrakï* (Abhi A 109a9) < *otra+kï* (< *orto* 'middle'), *sačïrayu ün-* ‚to leap out' (Suv 315,5, BT XIII 19,76) < *sačra-, yaltïrïyu* (BT III 997) < *yaltrï-* ‚to glimmer', *amïran-* (UigTot 116) < *amran-* ‚to love', *amuru, amïru* < *amru* ‚continuously', *basurok* (ShōAv 317) and *basuroklug* (BT XIII 39,22) < *basrok, oruŋu(t)* < *orŋu(t)* 'general' (examples in OTWF 79-80), *käŋiräg* (BT III 972) < *käŋräg, müŋürä-* (BT III 270) < *müŋrä-, maŋïran-* ‚to call out' (ShōAv 274, Shō XII b 12) < *maŋra-n-*, *öŋirä* < *öŋ+rä* (U III 889), *tägärä* < *tägrä* (TT VII 29), *soŋïra* < *soŋ+ra* (BT III 891). When, in late Uygur texts (ETŞ 13,162, BT II 960) *uturu* 'facing' replaces normal *utru*, this is likelier to come from such a process than to be a case of retention of the original stem vowel. The additional vowel in the word spelled *sädiräk* (< *sädräk*) in ETŞ 12,8 does not count as a syllable in verse; this could mean that a scribe introduced it and not the author.

Equally in late texts auxiliary vowels occasionally appear also when no /r/ is around: with /ŋ/ we have, e.g., *taŋusok* ‚wondrous' (Ernte 62, BT XIII 46,35), from *taŋ+sok, äŋimiš* < *äŋ-miš* (BT III 381 as discussed in UW 381), *öŋülüg* < *öŋ+lüg* (BT III 1010) and *öŋidün* < *öŋ+dün* (BT III 229); with /l/ e.g. *tägülök* (KPZieme 1) < *tägl-ök* ‚blind'. Another stem involving the difficult cluster /rŋ/ may have occurred in **ïrŋa-* 'to shake (tr.)', which was either broken up by an auxiliary vowel as in *ïrïŋag* (BT XIII 25,8), or underwent metathesis as in *ïŋrag* (BT VIII B 88; Kinkashō A,d) or gave up its nasality as in *ïrgag* (many examples; see OTWF 188).

/r/ is prone to get dropped. This sometimes happens even in permitted coda clusters: *bärk* 'tough' normally appears as *bäk*, *tärtrü* 'inverted, crosswise, in the wrong direction' often as *tätrü* (documented in OTWF 729) and *kurtgar-* 'to save' often as *kutgar-* (OTWF 735-6). *+lAr+kA* becomes *+lAkA* in *ulug ïšlaka* 'to great affairs', *ašlaka* 'for feasts' and *kïšlaka* 'during the winters' (DLT fol. 294) and *bilgäläkä* 'to the wise ones' (fol. 112). The /r/ of the formative *+dUrXk* is dropped in

burun+duruk > *burunduk* 'nose ring', where the base also has an /r/; see OTWF 104-5. The postposition *birlä* gets simplified to *bilä* in later Uygur. *ketmän* 'hoe, mattock' may come from *kärt-* 'to notch'.[201] The conditional suffix *-sAr* consistently appears as *-sA* not only in Qarakhanid and such late lay texts as the ones collected in Heilk but also in BuddhKat (though very rarely in the numerous examples for the conditional found in Brāhmī texts); /r/ is occasionally dropped in the aorist suffix as well. The Brāhmī ms. TT VIII L has a number of instances of the loss of /r/ as a type of haplology (section 2.412).

Double consonants often get simplified, double /l/ e.g. in *köŋülüg* < *köŋül+lüg* (U III 39,25, UigOn II A 1, TT X 276), *bäčälig* < *bäčällig* (BT V 21,456), *kuluk* < *kul+luk* (KP 23,3), *talan-* (Heilk II p. 4, colophon) < **talu+la-n-*, *elän-* < *el+lä-n-, yeläyü* 'ostensible, apparent' < *yel+lä-yü* etc.; *tükälig* < *tükäl+lig* is especially common. Thence, *elig* 'king' no doubt comes from *el+lig* 'having a realm', *olar* 'they' < **ol+lar*[202] and *ulug* 'great' possibly < *ul+lug* 'having a sole or base'.

Simplification is most common with velars, e.g. *korku* < *kork-gu* (DKPAMPb 81). We also have simplified dative forms: *kičikä tägi* < *kičig+kä tägi* (Xw ms. R r 16), *suvsamaka ... katïglanmaka* (for *-mAk+kA*) in TT II,1 37-38, *oruka* < *oruk* 'path' *+kA* (M III 7 III r 3), *adaka* < *adak+ka* (M I 5,13) *konaka* < *konak+ka* in BT V 13 etc.;[203] the dative spelled as *irinŋä* in Manichæan writing in M I 5,14[204] can explain the shape of the pronominal dative. Velar simplification is usual in word formation, e.g. *yarlïka-* 'to pity' < *yarlïgka-* and *agrïkan-* 'to feel pain' < **agrïg+ka-n-*; *talgok* ~ *talkok* 'fastening peg' < *talk-gok, sukak* 'male gazelle' (DLT etc.) presumably < **suk-gak*, from *suk-* 'to thrust (with the horns)' and *yulkak* (or *yulgak*) *iš* 'swindling' < *yulk-* 'to get some use or profit from something' (Maitr 62 v 14) with the same simplification. We have the evidence of DLT fol. 202 that *tikän* 'thorn' comes from *tik-gän*, i.e. 'the stinging one'. *kömür* 'coal' is derived with the formative *-mXr* (OTWF 390), either from *köñ-* 'to burn', or from

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[201] *kärki* / *kärgi* 'adze' may come from the same stem but in the latter two lexemes the /t/ and not the /r/ is dropped. The simplification *ärklig* > *ärlig* is discussed in the UW entry for *ärklig*.

[202] Unless *ol*, whose /l/ has no parallel anywhere in the language, came about through metanalysis of *olar*.

[203] Note that all the sources quoted here are Manichæan; this need not be a phonetic characteristic of a Manichæan dialect, however, but could also be due to laxer (or perhaps more phonetic) spelling conventions.

[204] Same passage as the previous instance. *iriŋ+kä* would have been normal. For the *n* before the *ŋ* cf. *irinŋ* for *iriŋ* four lines before and also further on in the text; such spellings are typical for pre-classical texts.

köm- 'to bury'; cf. *kömäč* 'a round loaf which is buried in hot ashes' with the formative *-mAč*, which forms names for dishes (OTWF 319).

Alveolars are simplified mainly in late texts, e.g. *ardaš* < *art+daš* (eight times in the QB), *kutadur-* < *kutad-dur-* and *örlätür-* < *örlät-dür-* (both ETŞ 10) and *kotur-* < *kod-dur-* (twice Suv).[205] We do not know whether such simplification took place in the language of the runiform inscriptions, as double consonants are there usually spelled as simple ones (cf. T.Tekin 1968: 47-48).

The simplification tč > č, at any rate, is already attested in Orkhon Turkic: I agree with the reading *očok* 'stove' in Tuñ 8. *očok* < **ot+čok* is attested also in three among six mss. in TT VI 86; the rest of them and some late texts write *otčok* (see OTWF 108), but there probably was not much phonetic difference: Phonetically speaking, it all amounts to [VttʃV] vs. [VtʃV]. We also find *edärči* (TT IV A 57) < *edär-t+či* (QB) 'tracker', *okïčï* (QB) < *okï-t+čï* and *köčök* (DLT) < *köt+čök* 'buttocks'. If *otačï* 'medical doctor' comes from **ot+ač+čï* '*a person busy with small herbs', it would show the simplification of double *č*.[206] On the other hand, the form *katčïgsïzïn* (= *kač-ïg+sïz+ïn*) quoted in Zieme 1991: 145 shows that [č] could be spelled as TC. *ištin* < *ič+tin* in SUK Lo9,5 and Mi17,11 is again different: Phonetically speaking, this is VtʃtV > VʃtV. With this word, the simplification could have been helped by parallelism with *taštïn*: We find *ištin nom taštïn el* '(may) religion in the spiritual domain and the state in the physical domain (prevail)' already in M III nr. 27 v16.

2.406. Metathesis

In late texts there are metatheses of clusters with /r/, e.g. *ördäk* > *ödräk, bušrï* 'wrinkle' < **bur(u)š-* (cf. OTWF 344), *sarya-* (BuddhUig I 335) < *sayra-* 'to twitter', *särki-* (Hochzeit 32) < *sekri-* 'to leap', *orpak* < *opra-k* 'shabby', *buryuk* < *buyruk* 'minister', *äŋräk* < *ärŋäk* 'finger', *ïrgag* ~ *ïŋrag, orto* 'middle' > *otra* (and further *otïra*) and so forth. *ädräm* < *ärdäm* 'virtue' appears in MaitH, which is not a very late text.

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[205] OTWF 870 (index under „geminate simplification") refers to further examples of the phenomenon.

[206] In Ht VII 1174, Arlotto had read a word to be analysed as *kör-ünč+či+lär* as *körünčilär* and Röhrborn 1994:108 had explained this as just such a simplification. In his edition of the text, Röhrborn now sees two Čs, and in a note to the passage states that a helping vowel is sometimes introduced in such cases, "um einer Vereinfachung der Geminate vorzubeugen, ... wie im Falle von *sakınčučı* und *y(a)rlıkančučı* (vgl. AbitIst 103)". The matter (and the passage referred to) are commented on in OTWF 114-115; it is, however, related to the alternation between *-(X)nč* (OTWF section 3.104) and *-(X)nčU* (OTWF section 3.105), which is a more complex phenomenon.

Among the variants *kutrul-* 'to be saved' and *kurtul-* the former is probably the original, but both are rather common from quite early sources on; see OTWF 667-8 for some of the examples.[207] *yaltïr-* (ETŞ 20,64) < *yaltrï-* 'to gleam' and *ogurla-* 'to steal' < **ogrï+la-* (discussed in OTWF 441-2) show /r/ exchanging places with an adjacent vowel; see OTWF 313 for *yogurt* 'yoghurt' ~ *yogrut* ~ *yorgut*. In other cases /r/ gets dropped by dissimilation, as in *ämirkäš-* < **ämri-rkä-š-* (BT III 990) or *bakïr-* 'to shout' < **bar+kïr-* (cf. Mo. *barkira-* etc. and Turkish *bar bar bağır-* 'to shout loudly'). Connections such as *kükürt* / *kükrä-* 'to thunder', *tigirt* / *tigrä-* 'to clatter', *maŋïrt* / *maŋra-* 'to bellow', *täpi(r)t+siz* / *täprä-* 'to move' and in fact the relationship between the formative *+kIr-* and verbs ending in velar + °*rA-* show how wide-spread sound change around /r/ was in onomatopoeias.

In OTWF 569 we took *täšgürüš-* to come from *tägš-ür-üš-* by the change /gš/ > /šg/; the process making *täzgin-* in the QB from the common *tägzin-* 'to revolve' and *üksintä* 'in his presence' < *üsk+in+tä* is similar, all involving velars and sibilants. OTWF 358-359 shows *-kUč* and *-čUk* to be metathesis variants, the latter appearing after bases ending in /r/ or /n/. Metathesis took place also with *y(a)lvak* < *yavlak* in Fedakâr 89, with *yamgur* < *yagmur* 'rain' in UigTot. Qarakhanid Turkic *küzäd-* 'to guard etc.' > *küdäz-* (together with derivates) may have taken place under the influence of synonymous *küd-*.

2.407. Parasitical consonants

There sometimes appears a parasitical alveolar between /l/, /r/ or /n/ and a following velar or /r/, e.g. in *koltgučï* 'beggar' < *kol-gu+čï*, probably also in the causatives *amïrtgur-* 'to pacify' < **amïr-gur-, körtgür-* 'to show' / *körtkür-* < **kör-gür-* and *köndgär-* < **kön(i)+gär-* (DLT fol. 365). The alveolars in the DLT verbs *čaldra-, kaldra-* and *küldrä-* (OTWF 471) are secondary. Another example is the form *oltrup* in M II 11,13, the converb of *olor-* 'to sit': When the second vowel of the stem is syncopated and the /l/ and /r/ get into adjacency, a /t/ intervenes. This cluster appears to have been preferred to having a syllable start with /r/ while the previous one ended in /l/; this eventually led to the replacement of Old Turkic *olor-* 'to sit' by Qarakhanid and later *oltur-*: The /t/ was subsequently kept also in forms whose suffix did not start with a vowel. To make that adapt to Old Turkic phonotactics, a vowel had, in a second step, to be introduced between the /t/ and the /r/. For

[207] *kutul-*, another early and widespread variant, could have come from contamination with *kut* 'good spirit'.

the same reason Uygur *olr-ug* was replaced by Qarakhanid *oldr-ug*.[208] The passage š > č after /r n/, which presumably takes place in *kïrča-* < *kïrïš+a-* and *-(X)nč* < *-(X)n-(X)š,* can be seen as a related phenomenon, [č] being equivalent to [tš]: Here, that is, we also witness the introduction of an alveolar between two syllables, one ending with /r/ or /n/ and the other starting with a consonant.

2.408. Consonant assimilation

Assimilation between consonants can concern a number of features. We will first deal with the voice feature, then with that of nasality, next with the mode of obstruction and finally with place of articulation. Consonants can also be influenced by vowels, dealt with last in this section.

Assimilation of voicelessness between adjacent consonants is the rule in Qarakhanid but not in any other variety of Old Turkic. Still, it can be shown to have taken place in a few cases in Uygur as well. In Ht X 796, e.g., *yïlïg+kya* is spelled with two dots on the *g*, indicating that the word was pronounced as *yïlïkkʸya*; /g/ appears to become voiceless also before /t/, in the verb stems *agtar-, agtïn-* and *agtur-* discussed in section 2.34. This is backward assimilation between consonants. In other – exceedingly rare – cases, voicelessness spreads forwards, e.g. in *eštür-* < *ešid-ür-* 'to proclaim' and *köm-üš-täči* 'burying each other' in completely destroyed context (M III 32,2$_2$, WilkKatMan nr. 48). *ič-gü* appears as *ičkü* in Xw 82 in the London ms., which is in Manichæan script (in which front G and K are quite distinct letters).[209] *tütz-ük* ‚incense (stick)' comes from *tüt-üz-* ‚to fumigate', but the form with /z/ is attested only once (Windgott 36): This common lexeme is otherwise (even in early texts such as the Mait) always spelled as *tütsük*. Similarly *säkiz on* '80' and *tokuz on* '90' become *säksön* and *tokson* in the DLT.

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[208] The existence of *'olturmiš'*, made up in Johanson 2000: 62 as Old Turkic, is highly unlikely in that language. The EDPT considers *yartïm* to be a secondary form of *yarïm* 'half', "with an intrusive -t-". however, an intrusive *t* never appears before a vowel.

[209] The use of K might have been meant to show stop (as opposed to fricative) pronunciation at syllable onset. *elt-käy* '(they) will convey (him)' in M III nr.12 r7 does not mean too much as the text in several cases confuses voiced and unvoiced consonants (*yäg* for *yäk* 'demon' etc.). The value of *ičkü* should not be overrated either, as the ms. may have had a source text in Uygur script. We can make the same assumption for Maḥrn, whose first part is dated to the year 762, because the Uygur ruler is called *ay täŋridä xut bulmïš alp bilgä uyyur xnγān* and not *xaγān* (confusion of *alef* and *nūn*) and because 'prince' is, in that text (in Manichæan writing) indiscriminately spelled as TGYN, TKYN and TQYN (Manichæan Q not being characteristic of back-vowel context).

In section 2.410 we have a different explanation for why the formative *-sXk-,* < *-(X)z-(X)k-*, has /s/ in its onset.

On the other hand, what at first sight looks like a backward dissimilation in voice has been noted for the instances of suffixes starting with an alveolar (e.g. the causative suffix *-tUr-)* when they appear after /t/: As observed in OTWF 830-831, the result is *td* whether the stem ends in /t/ or /d/, in fact also when the suffix (e.g. the preterite morpheme) starts with /d/. Spellings like *kotdum* < *kod-*, *yatdïlar* < *yad-dïlar* (Ht VIII 73), *ütdä* < *üd* 'time', *unït-dur-* or *yokatdur-* < *yokad-* are common in texts which otherwise do not confuse alveolars. This rather consistent habit can be understood to indicate that the first alveolar was pronounced strongly (as a stop?) and the second softly (as a fricative?).

Johanson 2001: 1726b is of the opinion that the relative absence of progressive devoicing in Old Turkic (the phenomenon being the rule in subsequent stages of the language) is due to the presence of short unwritten vowels at the end of stems. This is an *ad hoc* hypothesis set forth in great detail in Johanson 1979: 68 ff., whose material base is narrow indeed: Firstly, some Mongolic cognates of Turkic elements often have an additional vowel but the explanation of this discrepancy may in many cases not lie within Turkic but within Mongolic. When such vowels were dropped at the end of verb stems, they reappear within the aorist suffix, as pointed out by various scholars including Johanson, I myself and T.Tekin; there is no reason to take them to have been retained if they are not spelled out. Secondly, the Turkic-Khotanese Wordlist has the *shwa* character transcribed as *ä* which signals the lack of any vowel at the end of words. When it is used within words, it appears not only before suffixes and not especially after /p t s/ etc., as Johanson 1979: 73 says, but a number of times also after /r/ and /l/, e.g. in *kirpik* 'eyelash' or *sakaldruk* 'throat strap for headstall'.[210] This disqualifies the point he is trying to make, as do the numerous voice assimilations taking place with consonants having the same place of articulation, which he himself discusses subsequently. No invisible vowels can therefore be made reponsible for the fact that voice assimilation is marginal in Old Turkic; voice assimilation is not a universal phenomenon, and Old Turkic differs from modern languages also in other significant ways.

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[210] A word spelled *baśä-sīysa* said in Johanson 1979: 73 to represent *baš+sïz* seems not to appear in that text and I wonder where (if at all) it *could* have existed. If the author created it to illustrate his point (which would in itself be legitimate), he does not actually say so.

The forms *ämŋän-* (twice) and *ämŋäk* (twice) in BuddhKat come from *ämgän-* and *ämgäk* and thus show progressive assimilation in nasality. *öŋrän-* < *ögrän-* in Ht VIII 43 is (if the N should not be interpreted as a superfluous *alef*) similar but regressive. A better known form of non-contact regressive nasal assimilation takes place when onset *b* is followed by a vowel and then a nasal; we then have *b* > *m*, e.g. in *bän* 'I' > *män*. *um-du+čï* 'beggar' from *um-* 'to hope' is spelled as *untučï* in ShōAv 21; this is no doubt a case of regressive assimilation in the point of articulation, since both /n/ and /d/ are alveolars.

A phonotactic phenomenon involving consonants and attested only in back-vowel environment is that stops become fricatives before /š/. In this position, /k/ appears as [x] e.g. DLT *čaxša-* and Uygur *čaxšaš-* < **čak-ïš+a-*; *yaxšïngu* 'sleeve cuffs' is attested in Ht VII 1292.[211] /p/ appears as [f], e.g. in *yafšïn-* 'to adhere, be attached to' < *yapïš-*, spelled with *f* in Pothi 127, which is in Manichæan writing. This is a case of assimilation, as spirants like *š* are, of course, also fricatives. Uygur probably distinguished between *oxša-* 'to caress' and *ogša-* 'to resemble' (/g/ realised as a fricative); the latter is six times spelled with *h* in Brāhmī, but Brāhmī rendered [γ] with *h* as well. In the DLT, however, where there was voice assimilation, both appear as *oxša-*.

In TT X 459 and 481, *čïn+gar-u kör-* becomes *čïŋgaru* (spelled CYNKX'RW) *kör-*, i.e. an alveolar nasal turns into a velar nasal:[212] The place of articulation has shifted backwards under influence of the following velar.

In some words in some varieties of Old Turkic, /n ŋ/ become /m/ beside rounded vowels: Hamilton 1977 discusses a.o. *kömül* < *köŋül* 'heart'. OTWF 99 and 104 document the lexemes *boymul* < *boyun+* and *kömüldürük* < *köŋül+* (which is also the source of Turkish *gömlek* 'shirt'). Another instance is *yürüm karak* < *yürüŋ karak* 'the white of the eye' in Wordlist 40.

2.409. The appearance of voiced stop allophones

Some scholars had thought that consonants in runiform inscriptions undergo progressive voice dissimilation such that voiced coda

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[211] Mark Kirchner has found exactly the same phenomenon in Kazakh.

[212] The text writes *čïŋaru* but Peter Zieme has confirmed for me the reading presented here. This does not appear to happen elsewhere in published parts of the DKPAM, to which the TT X text belongs. DKPAM instances in U III 36,17 and $53,4_2$ are misquoted in the footn. to TT X 459: In both places the edition has *čïngaru kör-* but should have had *čïnγaru kör-*, as visible on the facs.. This is also what appears in three other U III instances.

consonants were said to be followed by variants of suffixes starting with unvoiced consonants, whereas unvoiced coda consonants were said to be followed by variants of suffixes starting with voiced consonants. This view appears to have first been expressed in 1961 concerning the Tuñoqoq inscription by René Giraud, who edited this inscription. Tekin 1968: 100 speaks of "contact dissimilation" in the Orkhon inscriptions in general, all his examples being cases where the letters *d* and *g* were replaced by *t* and *k* after /r l n/; the only 'g > k' examples he supplied were the words spelled *ärkli* 'being' and *kulkak* 'ear'. *kulkak* is opaque and may never have had a /g/, leaving us with *ärkli*.[213] For alveolar contact T. Tekin (also Tekin 2003) has the suffixes of the constative preterite as well as *+dA, -dOk* and *-dAčI*. whose D is replaced by T.

Johanson 1979 argued against this view and has shown this not to have been the case at least as far as the alveolars are concerned. He states that the phenomenon is limited to the *t* runes which follow /r l n/ and sometimes /z/ where the suffix is otherwise spelled with a *d* rune; he makes it likely that this variation in spelling was sub-phonemic, *t* standing for the [d] allophone of /d/ whereas *d* is likely to have stood for the [δ] variant of this phoneme, which must have been the main allophone. His view in that domain has been adopted in section 2.32 above. Johanson's hypothesis seems to be made likelier also by the existence of ligatures for /n/ + alveolar and /l/ + alveolar: These apparently reflected the fact that this alveolar was neither [t] nor [δ], the sound [d] in fact turning up only after /n l r/ (and partly /z/). Why there then was a ligature for /n/ + /č/ and why the ligature /n/ + alveolar appears mostly in back-vowel words[214] remains, however, unclear. The absence of a ligature for /r/ + alveolar can be explained by the fact that

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[213] Clauson repeats Giraud's statement on p. ix of the EDPT. T.Tekin 2003: 76-78 retains this description, with numerous examples from Orkhon and Yenisey Turkic and the IrqB ms. for stems ending in /l n r z m/. For velar contact he now gives, beside *kulkak* and *ärkli,* also *'tamkalıg'* from the Ačura (= E26 Yenisey) inscription. The word in question is interpreted as $^{a}t^{a}$*+m+ka* 'to my father' by Vilhelm Thomsen's assistant Kurt Wulff: This makes it regular, since the dative suffix has a voiceless velar; *(a)t(ï)mka* 'to my horse' would also be possible. See p. 184 for the appearance of *+(X)mkA* beside *+(X)mA*. *är-kli* is thus left as the only example for velars.

[214] The Orkhon inscriptions have more than 80 examples of the n^t/d ligature in back-vowel words, more than 25 sequences of *n* and *t* in front-vowel words and only 11 cases of the /n/ + alveolar sequence being spelled with the ligature in front-vowel words; there is not a single example of the sound sequence /n/ + alveolar spelled without ligature in back-vowel words anywhere in that whole corpus. The existence of the n^č ligature cannot be explained along the lines proposed by Johanson – possibly *ant* ('oath') and *anč* or *änč* were ideograms.

/d/ seems to have surfaced as [d] after /r/ only when it appeared at the beginning of verbal suffixes, the constative preterite, *-dOk* and *-dAčI*, but hardly ever at the beginning of *+dA, +dAn* / *+dIn* and the formative *+dAm*; nominal suffixes generally do not replace d^1 / d^2 of their onset with t^1 / t^2.[215] /r/ thus appears to have had an intermediary status. The realization of /d/ as [δ] when appearing after vowels is further made likely by the spelling *tos(u)k* for what is clearly a form of the verb *tod-* 'to be satiated' in KT S8 and BQ N6: This is no doubt to be understood as *tos+suk* < **toδ+suk*. It is doubtful whether [ds] would have been assimilated in this way. What further emerges from the distribution of /d/ allophones after /r/ in the suffix onset is that nominal juncture differs from verbal juncture, the sequence [rδ] being enabled with the former but not with the latter. How was /d/ realised after voiceless consonants? [pδ] [tδ] [čδ] and [kδ] seem unlikely sound sequences. There appears to have been assimilation when the bases ended in /t/. With /p/ and /k/ there might have been assimilation to [fδ] and [xδ] respectively at least in back-vowel environment. I would expect /d/ to have been realised as [d] alsoafter front vowel /p/ and /k/ and also after /č/. If this is so, the fact that the spelling in these cases is not *t* would speak against the Johanson hypothesis.

A similar phenomenon may have existed in the labial domain: The voiced fricative /v/ appears sometimes to have been realised as the stop [b] (spelled with *pe* in Uygur writing) beside /l/ and rarely /r/: e.g. in *yublunmaklïg* (Ht VII 1994; cf. OTWF 641) < *yuvlun-* 'to roll about', *kübrüg* (BT III 947) < *küvrüg* 'drum' and *yalbarïnčïg* 'inducing begging' (BT XIII 29,8) < *yalvar-*; *yalbar-* is (beside *yalvar-*) common also in Suv (and survives as variant of *yalvar-* in Middle Turkic). Indirect evidence is Mongolian *jilbi* ~ Old Turkic *yelvi* 'magic' (cf. OTWF n.383). In Manichæan writing, which has a B distinct from P, we find e.g. *yablak* in TT II,2 22, *nirban* in Pothi 167. In that writing system, however, V is distinguished from B only by two diacritical dots above; since we have instances such as *kïb* 'fate' (BT V 134) for what appears as *kïv* everywhere else (e.g. three lines further on in the same text) or *nizbanï* in TT II,2 73 and 82 versus *nizvanï* in l.20, it is highly likely that these dots were simply omitted.[216] It might be that *yablak* (same text!) and *nirban* are similar cases of omission.

Johanson 1979: 7 does not deal with the two instances of the letter K after sonants which Tekin 1968: 100 mentions, stating that they are, as

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[215] The only such examples I have found in Orkhon Turkic are three instances spelled *yertä* (vs. four of *yerdä*) in KT and BQ.

[216] Thus already Zieme 1969: 35. Cf. also *sabčï* for *savčï* in Maḥrn 33.

derivates, isolated and opaque. This is true of *kulkak*[217] but not of the word spelled *ärkli*.[218] Johanson has consistently followed Schulz 1978 in reading this inscriptional word as *'ärkäli'*; still, e.g., in Johanson 2000, where he writes *'ärk[ä]li'*. I have, in section 3.282 below, tried to show that this view is groundless. Another suffix relevant for the discussion is *-gXn*. This suffix appears as *-kXn* explicitly in two Brāhmī instances, *kälkin* (TT VIII) and *turkun* (Maue 1996 21a 75; spelled with HK, which that text uses also for the velars in *kül-* or *kuš*), and in two Qarakhanid lexemes, where it is spelled with *qāf*: *barkïn* ('a determined traveller' thrice in the QB) and, again, *turkun suv* 'quiet waters' in the DLT. *yadgun*, *todgun* and *tutgun* are, on the other hand, Qarakhanid instances spelled with *ghain*, and the *g* did not appear in any other instance. The Qarakhanid examples are not conclusive by themselves, as Arabic *ghain* represents a fricative; *qāf* could well have been used for noting [ġ], a realisation of /q/ which exists in modern Arabic dialects and may well have existed already in Kāšġarī's days. Taken together with the Brāhmī instances, however, the distribution seems significant: [k] after /l r/, [γ] after other consonants. The formative *-gOk* / *-gUk,* dealt with in OTWF § 3.22, is spelled with K in *tol-kok* 'inflatable skin container' (*qāf* in the DLT) and *yun-kuk* 'soap' twice in Brāhmī writing, whereas instances where the suffix follows other consonants are spelled with G. *-gI* (OTWF § 3.110), finally, also appears as *-kI* with sonants: *bur-kï* 'frowning; wrinkled (of face)' has instances spelled with /k/ both in Arabic and Brāhmī writing, and *yan-kï* 'recompense' is in U II 77,24 spelled with double dotted X. After vowels and other consonants the suffix is well-established as *-gI*. In OTWF 321 I proposed to derive the particle *ärki* with this same suffix, while Röhrborn has proposed the form *är-gäy* as source (see section

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[217] Tekin's etymology for *kulkak* (deriving it from a Finno-Ugric verb) is unacceptable, and the one proposed in OTWF 75 is problematic as it involves a rare derivational suffix. The /k/ must be real, as it is also attested in the Brāhmī, Tibetan and Manichæan writing systems; a further Brāhmī example can be added from Maue 1996 text 3, l.113. *'*kulgak'* could have been taken to be the ultimate source if Oguz had been the only dialect group with the variant *kulak*. *kulak* is, however, the general modern and Middle Turkic form, found also in languages which do not drop /g/ after consonants. *kulak* is, moreover, the general DLT and QB form, *kulġak* appearing in the latter when demanded by the metre. Kāšġarī knows of *kulkak* and *kulχak* as variants. In view of all this there is no way to link the variants *kulkak* and *kulak* by any known synchronic or diachronic sound laws.

[218] See section 3.282 for the participle suffix *-(X)glI*, with which the Orkhon Turkic conjunction spelled as *ärkli* is no doubt formed. While the productive forms of *-(X)glI* do not lose their onset vowel even when added to stems ending in /r/, such loss is found in other suffixes (e.g. the *-(X)t-* causative) and is probably an archaic feature.

3.34 below). The /k/ of *ärki* is documented in sources in Indic scripts; both etymologies would take this /k/ to be the realisation of a suffix normally appearing with /g/. The reason why *-gAy* itself does not show forms with K after bases ending in /l n r/ can be that inflexional affixes in agglutinative languages tend to avoid irregular variations in shape;[219] this might also be the reason why, e.g., *+dA* does not become *'+yA'* after vowels or voiced consonants in those modern languages which changed /d/ to /y/. Spellings of *d°* or *g°* suffixes with *t* and *k* respectively after bases ending in /r l n/ *can* generally be read as having [d, g] as against [δ, γ] for the unmarked sound contexts, and the spellings *ärkli* and *kulkak* need not be counter-examples to Johanson's theory: The *k* may represent a voiced stop as against a fricative. Crucially, however, this interpretation is not obligatory, and a reading as [k] *cannot be excluded*: Especially in view of evidence from the Brāhmī writing system (where G does *not* imply fricativity) the replacement of /g/ by /k/ after /r l n/ appears really to have taken place: The reassignment to /k/ may well be historical fact, hinging on the possibility of assigning [g] to /g/ as well as to /k/ at some stage in the language's history. In section 2.34 I explained *ärkli* through the syllabification *ärk|li*.

2.410. Onset devoicing

The formative *-sXk-* (discussed in section 3.212) is highly likely to have come from the formative sequence *-(X)z-(X)k-*; this would therefore be an instance of the sound change /z/ > /s/. One possible reason for the change may be that /z/ is not stable at the beginnings of suffixes (*-zUn* became *-sUn* from Qarakhanid on), or at the beginning of syllables in general (*kavzat-* is often spelled with *s* in Uygur, and cf. *kabsa-*[220] attested at least thrice in the DLT), in view of its absence at the beginning of words. An early Manichæan text in fact has the shape *ut-zux-*, with *z*. Excluding Qarakhanid and looking at the Uygur instances of the suffix (listed in OTWF 700-704) we find that the bases of six of them, *al-sïk-, kun-suk-, ar-sïk-, bil-sik-, čal-sïk-* and *ur-suk-*, end with the sonants /r l n/, three, *tut-suk-, ut-suk-* and *yint-sik-*, with /t/ and one, *kuy-suk-*, with /y/. It may also be this preponderance of the sonants, which exists at least in the documentation, which let /z/ be replaced by

[219] Cf. the spellings *bulγay* (twice) and *adrïlγay* in Xw 137-8 in Manichaean writing. *bošunγalï* is also spelled with Γ in Xw. 187. Instances like *kïlkalï* with two dots over the Q in ms. TM 42b (U 4795) of Suv 34k 14 are meaningless, as we find *agïr* in the same line and *oglï* in v13 also spelled with dots over the Q.

[220] Possibly to be read as *kapsa-*, where the [p] could have evolved from [f].

its voiceless counterpart /s/, as we find D replaced in these circumstances by T. *ut-suk-* is, after all, attested also with the earlier form with /z/. Concerning the other pairs of voiced and voiceless consonant letters discussed above, the rather convincing hypothesis was that what lies behind this opposition is in fact subphonemic [δ] vs. [d], an opposition not in voice but of continuant vs. stop. Such an opposition cannot have been relevant for /z s/, however, as both are continuants. Assuming the correctness of the Johanson / Sims-Williams / Doerfer hypothesis on continuants vs. stops, we are therefore for the *-sXk-* forms left with the explanation that /z/ was to be avoided at syllable onset.

2.411. Changes affecting /g/

In section 2.34 we saw that /g/ was pronounced as a fricative not only in back but also in front synharmonism. Fricative pronunciation explains the early loss of this velar in the variant *äšäk* of *äšgäk* 'donkey'. The dropping of the velar took place earlier and much more massively in *kärgäk* 'necessity', as this is also a near-grammatical predicate signifying 'it is necessary': BuddhKat 37 (Tibetan writing) writes GA.RAG, although a *g* is spelled out in this position in a number of other words occurring in that text. In Brāhmī writing, *käräk* occurs in three medical texts, but other Brāhmī sources use *kärgäk*: TT VIII I has about eight instances and there are further ones in TT VIII M 18 and on l.8 of text 23 in Maue 1996. Another instance of *käräk* occurs in a popular text about omens which also has four instances of *kärgäk*, in TT VII 28,54. Qarakhanid sources have hundreds of instances of *käräk* and not a single one of *kärgäk*, although the DLT mentions the base verb as *kärgä-*: This latter fact shows that the reasons for this early loss of the velar were not only phonetic but also had to do with the function and frequency of *kärgäk*.[221]

Another indication that intervocalic /g/ tended to get pronounced like a glide in late texts can be found in the spelling *igä* of the word signifying 'master', which was also spelled *i-ä* (with graphic space between the two vowels). It seems likely that this comes from *idi*, which has the same meaning, although *idi* and *igä* occur together as binome in the 14th century inscription of CYK. *igä* would then be a hypercorrect spelling of *iyä*, which would be the result of a late change of intervocalic /d/ to /y/. The repeated appearance of *üyür* '(millet)

[221] Presumably in order to explain the early appearance of *käräk*, Doerfer 1993: 30 takes *käräk* and *kärgäk* to be different derivates from one source; this is impossible, as there is no source in sight for *käräk* other than *kärgäk,* which comes from *kärgä-*.

seed' as *ügür* in the DLT is a similar case of hypercorrect spelling: The documents of SUK have the spellings *üyür, üür, ür, ü'r* and *yür*. This is apparently also what happens when Kāšġarī (fol. 504) says that *bög* is "more correct" than *böy* for 'poisonous spider'.

I have noted two early cases /g/ where is dropped from the sequence *°üg+l°*, in *ütülä-* (Maitr 84 v 24 = BT IX 209,24) from *ütüg* 'flatiron' and *tütsülüg* (TT V B 130 and 135) from *tütsüg* 'incense'. These two instances, which could just be errors, are not an adequate base for generalization concerning coda position. In the DLT the desiderative suffix *-(X)gsA-* becomes *-(I)sA-*; see OTWF 527 for details. This drop appears to have taken place in late Uygur as well: There is no doubt that *arvïšïg ... äšidisärläri tïŋlamïšlarï kärgäk* (BT III 731) signifies 'They need to wish to hear and to listen to the *mantra*', that the first verb is the aorist participle of an *-(X)sA-* stem.[222] Note also *äkün* in (early) ChristManManus Manichæan fragment v 9, which may come from **äki+gü+n* 'two together' if it is not an error but an elision of intervocalic /g/.[223] In the very common *nälük* 'to what purpose', /AgU/ appears to have given /A/, assuming that this comes from the equally common *nägülük*.[224] A sound change *AgU* > *A* apparently took place also in the collective form *bägät* found in several 13th-14th century texts, as documented in OTWF 82, and in equally late but Western *bayat* 'God', probably < *bayagut* 'well-to-do gentleman'. Other interrogative phrases which were reduced to two syllables are *näčök* < *näčä ök*, *nägük* < *nägü ök* and the DLT's *näräk* < *nä käräk.* I take *kerü* 'back(wards)' and *bärü* 'hither' to come from **ke+gärü* and **bä+gärü* respectively, i.e. to have been contracted from original directives in *+gArU*.[225]

The spelling of *kovuš* 'groove' as *koguš* (see OTWF 421) is also 'hypercorrect', but is evidence of a process /g/ > /v/ beside rounded vowels. This process can be seen when *kagrul-* 'to undergo mental

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[222] It is thus (against the editor's statement in the footnote) of identical form as the Ottoman future. The Insadi (or better Avasadï) sūtra is, after all, later than the DLT.

[223] *biz äkün*, which can be read also as *bizäkün* as Z is never joined to the next letter, appears in HamTouHou 15,3, TugFrühText 10 (spelled with S), perhaps in BT V 675 and in Hymnus 22. Concerning HamTouHou it had been thought that this is another instance of *äkün*; the context makes it likelier that *bizäkün* was a place name, however, as proposed by Wilkens, the editor of the last mentioned source, following an oral suggestion of Röhrborn.

[224] Examples in the EDPT and OTWF 122. Cf. Turkish *niçin* 'why; what for' < *ne için* and *nasıl* 'how' < *ne aṣl*.

[225] The first is related to (instrumental) *ken* and to *kedin*, the latter in some way to *bän* 'I' and *bo* 'this'.

torture' alternates with *kavrul-*, the latter apparently turning up even several times in Mait; see OTWF 661. The verb *kögädtür-* 'to praise, to embellish in words' is, similarly, spelled as *kövätdürüp* in Suv 135,12. On the other hand the repeated appearance of *äšgäk* 'donkey' as *äšyäk* in the DLT shows a process /g/ > /y/ in fronted surroundings in that text.

2.412. Haplology

Haplology is found e.g. in *orton* < *orto+dun*, both 'being in the middle' (discussed among the *+dXn* nominals) and in *kamagu* < **kamag+agu*, a collective expansion of *kamag* 'all'. *tiksiz* < *tik-ig+siz* 'unstung, unpricked' in Suv 529,20 may not be an error in the strict sense, in that it was presumably pronounced that way: Cf. *yïglïg* apparently for **yïg-ïglïg* in Abhi B 1404. In an instance like *bo yarlïg ešidip* (KP 18,8) 'having heard this order' *yarlïg could* have been simplified from accusative *yarlïg+ïg*.

/VrVr/ is quite susceptible to syncopation: In aorist forms of stems ending in °*ur-* in BuddhKat, *alŋaddurlar* comes from *alŋad-dur-ur+lar* and *olur* comes from *olor-ur*. Similarly *öŋätür* in Heilk I 14, which signifies 'it cures' and must come from **öŋ+äd-tür-ür*. The Brāhmī ms. TT VIII L has forms such as *tükärmäsär* < **tükä-r är-mä-sär* (12-13 and 21) and *tersär* < **te-r är-sär* (33). *ärkän*, which is used as a temporal conjunction, may *possibly* be the result of syncopation from **ärür kän*, with a particle described in section 4.633 as being added to temporal adverbs (and cf. the temporal suffix *-mAzkAn*).

The DLT distinguishes between *kisi* 'wife' and *kiši* 'person'; this distinction has by the EDPT and by Zieme in *TDAYB* 1987:306-7 been taken to hold for Uygur as well. Since such a distinction is found neither in runiform sources nor in any modern language and is at least not explicit in Uygur,[226] I take *kisi* to come from *kiši+si*: 'wife' is an inalienable term, from the group with which the possessive suffix often becomes part of the stem. Concerning Uygur, then, *kiši* could have signified both 'person' and 'wife', or the meaning 'wife' could have been borne by *kisi*. Verb / noun homophones ending in /š/ may all have been caused by haplology, as no example of the formation in *-Xš* derived from such verb stems appears to have survived: Qarakhanid *tüš* 'place or time of a halt' (hence sometimes 'midday') ought to come from **tüš-üš*, from the verb signifying 'get down (from a horse)', *tuš* in the phrase *tuš tulum bol-* 'to meet' from *tuš-*, same meaning, over *tuš-*

[226] Cf. the n. to BuddhKat l. 4. In Uygur script /š/ is practically always spelled as *s*.

uš,[227] *toš* 'water reservoir, pool', partly documented in the EDPT, < **toš-uš*, from *to-š-* 'to fill up', *sïš* 'a swelling' from **sïš-ïš* (both noun and verb listed in the EDPT), *koš* 'a pair' from *koš-* 'to conjoin'. *bagdaš* 'sitting with legs crossed' is likelier to have come from **bagda-š-ïš* than from **bagda-š*, as *bagda-* (found only in Qarakhanid) signifies 'to trip somebody'.[228] Haplology can always take place when consonants and vowels in two adjacent syllables share most phonetic features; *orto+dun* could actually also have been pronounced as *ortodon* and *olor-ur* as *oloror*.

2.413. Word fusion

In several different situations, word sequences become single prosodic units. Some noun phrases becoming lexical units are discussed in the beginning of section 4.12. Binomes, dealt with in part VI, are a special type of fixed collocations. Such close juncture can have phonetical results: *ini eči(lär)* 'younger and elder brothers' becomes *in'eči(lär)*, e.g. in ManBuchFrag 1,1 r 4, in M III nr. 8 VII v 10 and in Yenisey inscriptions. In this case, adjacent vowels of the two lexemes are involved, resulting in elision or fusion. Even occasional extensive contractions, such as *bïltur* 'last year' (Ht VII 1912) < *bir yïl turur* 'it is one year' cannot be wholly ruled out. We sometimes get linked spelling as in *ät'öz* also with the particle *Ok*, which usually, but not always, drops its vowel if the word it is added to has a vowel coda: For instance with *ölürtäči-k* in Tuñ 11. This clitic can be repeated, *(O)k Ok* then giving *kOk* in Orkhon Turkic. The variant *kOk* lives on in South Siberian Turkic to this day. Beside *anta ok* and *antak* we get ''NT''WX, where the two words are just spelled without space in between, but with an *alef* before the *o*. Cf. also, e.g., *yerintä'ök* in MaitH X 6a12, wrongly read as '*yirintänök'*.

ol becomes a clitic and loses its onset vowel in a few set phrases in which it is used as copula: We find *kayul* 'which one is it?' < *kayu ol* a number of times in the catechism in Tibetan script. *nägül* < *nä+gü ol*

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[227] *tušuš* is, I think, attested in *alaču tušušïnta* (U III 6,2$_3$ and DKPAMPb 741, the same passage in two mss.) 'in front of (or opposite) the tent' and in *anïŋ tušušïnta* 'in front of (or opposite) that (i.e. an orchard)' in Udayana 12. I don't think the instances should be emended away to *tušïnta* as proposed in EDPT 129b and UW 91a; nor do I think it possible to analyse the word as *tuš+ï+sïn+ta* with double use of the possessive suffix, as proposed by the editors of DKPAMPb, although the word is spelled with Y in the second syllable in that ms.: The other two mss. have W, and their proposal would entail too much of an exception.

[228] Additional possible examples for haplology in connection with this formation are mentioned in OTWF 265.

‘what (collective) is?’ appears e.g. Ht VIII 388 and 398 in the phrases *nägül öŋisi* and *adïrtï nägül* ‘What is the difference?’; there are a number of examples elsewhere in Hts; also in Tattvārthā, mainly in the phrase *iši nägül* ‘what is its business?’. The same phonetic process happens in *-gUl* < *-gU ol*, which, in late texts, becomes a suffix of impersonal mood meaning ‘one should ...’ (see section 5.2).

Cf. further the fusion of *nä ärgäy* to *närgäy* ‘what will become of ...’ twice in a runiform inscription (YE 41,8; cf. OTWF 301), involving fusion between the interrogative pronoun and the copula; similarly *näzä* ‘thing’ < *nä ärsär* ‘whatever’ four times in a late contract (SUK Mi19). Kāšġarī (fol. 197) states that *näräk* ‘Why is it necessary?’ (spelled without *alif* – or indeed any explicit vowel – in the first syllable, showing that the vowel was short) comes from *nä käräk*; the strong stress on ‘Why?’ here even led to the dropping of /k/.

Further inscriptional fusions with pronoun vowels occur in *bödkä* (KT S11, BQ N1 and 8 and E2) ‘at this time’ < *bo üdkä*, attested in K S 1 and *bučägü* < *bo üčägü* ‘these three’ in Tuñ 12: Note that the second (front) vowel prevails in *bödkä*, the first, back one in *bučägü*. Backward fronting, again involving *bo* (though without syllable loss), takes place also in *bökün* ‘today’< *bo kün* ‘this day’. It appears in *bökün bar yaran yok* ‘here today and gone tomorrow’ (Maitr Taf.118r12 = MaitH Y 12b27, Gedank p.133) and in *bögünkätägi* ‘till today’ in ManTürkFrag 7 and BT V 148. This word is spelled thus with G in Manichæan script in both mss.; this could be a case of voice confusion in the BT V text, which has another two instances for this phenomenon, but not in ManTürkFrag, which does not, and on the other hand has *kanyu* as a sign of archaicity. Since Old Turkic consonants do not get voiced between vowels, this should mean that an original **gün* (with *g*° in all Oguz languages) was here retained because it was not in onset position: This fusion would have come about before **g*° > **k*°.

kim+kä näŋ (pronoun and negative particle) is contracted to *kimkäŋ* in DreiPrinz 71 (and, damaged, in 86); there is a similar contraction in Orkhon Turkic. The postposition *täg* fused with the demonstrative pronouns *bun+* and *an+* by adapting to back harmony, giving *montag* and *antag*. *sizintäg* (instead of *sizni täg*) ‘like you’ in ChristManManus Manichæan fragment r 10 and *bintägi* ‘someone like me’ in Tuñ 57 (before Alyılmaz 2000: 110-111 erroneously read as ‘*büntägi*’ and since T. Tekin 1963 interpreted as a case of backward assimilation) are additional instances showing that *täg* was on the way to becoming a case suffix. The process appears not to have been quite complete in

Orkhon Turkic, however, as we also find an instance of *antäg* (Tuñ 29), where the postposition still retains its vowel.

In the verbal domain we get fusion between the vowel of the vowel converb and the onset vowels of auxiliaries following them. This happens in Orkhon Turkic with the verb *ïd-* (described in section 3.251), in *xaganïn ïčgïnï idmiš* 'quite lost their ruler' in Ongin F 2 and *anča (a)y(ï) ïdmiš* 'sent the following message' in Tuñ 34: Had there been no factual fusion, the converbs would have had the shapes *ïčgïnu* and *ayu*.[229] In Uygur the phenomenon is widespread with the verb *u-* 'to be able to' (described in section 3.253). The examples I have come across all involve the negative form *uma-*; the fusion therefore appears to have moved towards the creation of an impossibility form, which is a reality at least since Qarakhanid Turkic. In Manichæan sources we have e.g. *baru uma-* (Xw 75), *tutu uma-* (Xw 216), *uku uma-* (ms. U 232 quoted in Zieme 1969: 20), *sürü uma-* (M I 16,20), *särü uma-* (M III nr. 18, 36,8$_5$); in Buddhist sources e.g. *ädikü uma-* (TT V B 118), *tutu uma-* (U III 66,15), *tïdu uma-* (KP 27,3). The vowels of these converbs would have the shapes *-I* or *-A* if they were not being employed in this construction; cf. Erdal 1979b: 105. This assimilation does not yet take place in runiform sources, which have *artatï u-* (BQ E19) and *uča uma-* (IrqB LXI). Practically all of Uygur has it but it is prevented by the parallelism of biverbs, e.g. *ïya basa umadïn* (TT II,2 74), *ara yuva umadïlar* (Maitr Taf 202r12) or *]tIdA uka ugaylar* (Maitr Taf 26v8). *tïda um[a]d[ïn* has been read in Maitr Taf 72v22.[230]

2.5. *Morphophonology*

2.51. Native stems

The phonotactic compatibility of stems and suffixes demands suffix allomorphs, one set starting with a consonant, another with a vowel, to suit bases ending in vowel or consonant respectively. Thus there is a present participle suffix with the variants *-igmä, -ïgma, -ügmä, -ugma* after consonants, *-gmä, -gma* after vowels, for which we have the

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[229] Tekin 1968: 101 (§2.259, 2°) read this as '*anča yïdmis*' and took it to be an instance of external hiatus filled by a helping consonant; this was argued against in Erdal 1979b: 114 (n.30). Hiatus-bridging /y/ is a phenomenon peculiar to the Oguz branch and is unknown in Old Turkic.

[230] The editor states the remaining letters of the second word to be unclear but nothing else would probably suit the context.

morphophonemic notation *-(X)gmA*; the *X* symbolises a whole set of vowels: /i ï u ü/, also /o ö/ and perhaps others (see below). It is incorrect to give '-gmA' as morphophonemic notation (as most recently done by Tekin 2003: 17), and write *käl-i-gmä* "gelen" etc. as if there were a helping vowel *-i-* between the stem and the suffix, because the identity of this vowel cannot be predicted from the phonetic surroundings: The unstable vowel is e.g. /a ä/ in the formative *+(A)r-* or the collective suffix *+(A)gU* or the volitional suffix *-(A)lIm*, /o ö/ in the suffix *-(O)k* forming deverbal nouns. The choice between /X/, /A/ (standing for a or ä) or /O/ (standing for o or ö) depends on the suffix, which means that these vowels (whose appearance is steered by phonotactics) are part of the suffix.

Rarely, suffixes starting with a vowel retain this vowel in all positions, in which case bases ending in a vowel elide theirs: *+(U)t*, which expresses plurality with titles, appears e.g. in *tarkat, säŋüt* and *tegit,* the plurals of the titles *tarkan, säŋün* and *tegin*; it may have been borrowed together with these bases, possibly from a Mongolic language. Suffixes which thus replace a part of their base are called dominant. Dominance (first described for Turkic in Erdal 1979a) never applies to single-syllable vowel bases, as it would change them beyond recognition. It is also found with the suffixes *-Xš* and *-Xn* and one or two others.

A few of the suffixes starting with consonants drop these when added to stems ending with consonants: The 3rd person possessive suffix *+(s)I(n)* drops its /s/ when the stem has a consonant at its end, the ordinal suffix *+(r)Ar* drops its /r/, the genitive suffix of the runiform sources and a few Manichæan mss. *+(n)Xŋ* its /n/. Morpheme juncture is dealt with in greater detail in Erdal 1979a.

Synharmonism has been presented above in terms of phonemes alternating in an archphoneme framework as far as vowels are concerned but (seemingly inconsistently) as a matter of allophones in the consonantal domain; this has to do with the fact that the distinctions are, in practically all Turkic languages, salient for all vowels but only for a few of the consonants. Strictly speaking, syllables are affected by fronting and, in principle, even by rounding as wholes: Note that the runiform script has quite different front and back characters for most consonants (but not for all vowels); for the voiceless stops it even uses special characters depending on whether vowels before or after them are rounded or not. We have substantial evidence that Old Turkic /k/ was pronounced rather differently in front and in back surroundings.

We here give a classification of suffixes by archphoneme vowels. Vowels in brackets are dropped if the phoneme stretch preceding the suffix ends in a vowel (or in /r/ when the resulting cluster is admitted).

Suffixes containing the archphoneme /A/ are: *+čA, +dA, +kA, +gArU, +rA/yA, +lAr, +dAm, +AgUt, +(A)gU, +kIñA, +(A)n;* the postposition *yAn; +(A)d-*, *+(A)r-, +A-, +lA-, +(X)rKA-, +sIrA-; -(A)yIn, -(A)lIm, -Ar* (durative aspect suffix), *-mAz, -mA, -(X)gmA, -mAk, -gA, -A* (converb), *-gAlI, -mAtI(n), -gAn, -gAk, -mAn, -(X)pAn, -sAr, -gAysOk / -gAšOk; -Ar-, -mA-*.

Suffixes with /U/: *+gArU, +(l)dUrXk, +lXgU, +AgUt, +(A)gU; +U-; -yU*, *-U* (converb suffixes), *-(X)nčU, -Ur*, *-yUr* (aorist suffixes), *-gU* and *-gUlXk, -zUn; -tUr-, -Ur-* (and cf. postclitic *mU*). The second and third syllable of *altun* 'gold' and *küdägü* 'bridegroom' could be said to embody the archphoneme /U/ in that /U/ would be realised as /u/ in one case, as /ü/ in the other. The distinction between high and low rounded vowels is directly documented in texts written in Indic scripts.

Suffixes with /o, ö/: *+sOk; -(O)k; -gOk, -yOk, -dOk* and *-gAysOk / -gAšOk;* similarly the postclitic particle *(O)k.* Evidence for the vowel in the different suffixes will be given in the next chapter, where we deal with their morphology. All the suffixes mentioned end with /k/; since the archphoneme /U/ is in no suffix followed by coda /k/,[231] we get complementary distribution: /U/ → /O/ before /k/. Thence, /o ö/ must in these instances come from underlying /u ü/. If, on the other hand, the syllable preceding this process contains the vowels /u/ or /ü/, the suffix vowel can appear either with /o ö/ or with /u ü/; cf. *üzüksüz* (BuddhKat 31, Tibetan script) and *buyruk* (Khotanese Brāhmī) with explicit /u ü/ in the second syllable. In examples mentioned in section 2.401, /o/ and /ö/ in non-first sylables of stems are likely to be replacements for /a ä/ or /u ü/ when the preceding syllable has /o ö/; /X/ is also likely to have given [o ö] when preceded by /o ö/. These are instances of strict vowel attraction; what influence /k/ may have had on the vowels is not, however, evident in any way. High rounded vowels before coda /k/ could be lowered in stems as well, if the Harezm-Turkic appearance of *süŋäk* for 'bone' (Ata 2002: 50) is any indication; in Old Turkic the second sylable of this lexeme is always rounded, and this form would signify that the Old Turkic lexeme is to be read as *süŋök*.

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[231] /u/ and /ü/ are, however, followed by /k/ without their vowels getting realised as /o ö/ if they belong to the archphoneme /X/.

Suffixes with /X/: *+(X)z, +(X)g, +(X)n, +sXz,*[232] *+lXg, +lXgU, +lXk, +(X)m, +(X)ŋ, +(n)Xŋ, +dXn, +(X)t, +(l)dUrXk; +(X)k-, +(X)rKA-; -gUlXk, -Xš, -(X)nč, -(X)nčIg, -(X)nčU, -(X)m, -gXn, -(X)z, -(X)ŋ, -(X)l, -sXk, -(X)gmA, -(X)glI, -(X)p, -(X)pAn, -(X)yXn; -(X)t-, -(X)k-, -(X)z-, -(X)l-, -sXk-.*

Suffixes with /I/: *+čI, +sIg, +kI, +kIñA, +lI, +dI; +I-, +sIrA-; -(A)lIm, -I* (converb), *-I* (deverbal noun), *-Ir* (aorist suffix with *-(X)t-* etc.), *-(X)glI, gIl* (imperative particle), *-gAlI, -(X)nčIg* and *-vI*. The suffixes *+(s)I(n+), -mIš, -mAtI(n)* and *-(A)yIn* are, in the Orkhon inscriptions, usually spelled with s^2 and n^2; the instances are mentioned in T. Tekin 1968: 59. cf. also *katïg+di* with d^2 in KT N 2. The inscriptions of the Uygur kaganate, on the other hand, show a different picture: *-(A)yIn* is spelled with n^1 in both of its ŞU exs., and the spelling of *-mIš* in Tariat appears to fluctuate between s^1 and s^2. The Orkhon Turkic spelling of *suv+ïŋaru* with r^1 and w (not ẅ) in BQ E40[233] or consistent Uygur spelling of *-mïš+ka* with the letter X in Uygur writing, with double dotted K or Q in Manichæan writing all together add up to show that the fronting was subphonemic. Note also that KT S9 and BQ N7 spell *almatïn* with t^1 and not t^2. The instrumental suffix *+(X)n* could, in Uygur runiform inscriptions, be spelled with n^2 which, on the other hand, always write *+(s)In* with n^1 (e.g. in *atïmïn* in Tariat E4, *kanïn* S1), sometimes with explicit I.

Johanson 2001: 1726a makes the following surprising statement: "Suffixe sind am Anfang ihrer Entwicklung unharmonisch, invariabel. Im Ost-Alttürkischen[234] war z.B, das Dativsuffix *+qa* ein hinteres Suffix, während das Possessivsuffix *-(s)i* ein vorderes Suffix war. Das erste uns bekannte Türkisch weist also viele disharmonische Wortformen auf." The dative suffix (see below in section 3.124) *always* follows synharmonism,[235] however, and the unharmonic realisations of *+(s)I(n+)* as consistently front are clearly subphonemic. In section 3.122

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[232] This suffix may originally have had /I/: A denominal verb formative derived from it (documented in the OTWF) has the shape *+sIrA-*, the Tuñ inscription spells the suffix once as s^2z and once as s^2zn^2 (in the instrumental case) in two instances following rounded back vowels, and the Yenisey inscription E26 twice writes b^1wŋs^2Iz 'without shortage'. These are exceptions (IrqB 45 has explicit *otsuz suvsuz* 'without grass or water', e.g.) but they are early. Bang 1925: 40 thought that the suffix could originally have been an *-(X)z* derivate from *sï-* 'to break', which would fit with these facts; but the transition from /I/ to /X/ would still have to be explained.

[233] See section 3.122 below.

[234] I.e. the language described here.

[235] The only possible (though by Johanson unmentioned) reason for this view of the dative suffix is the dative *baŋa* and *saŋa* of the personal pronouns *bän* 'I' and *sän* 'you'.

we discuss the possibility that *+sï(n+)* and *+ï(n+)* were originally independent pronouns: They may possibly have become suffixes secondarily; this is not something one can (or should) say about any other Old Turkic suffix. Johanson's last quoted sentence is quite misguided as far as Turkic words are concerned; we will see in section 2.52 below that he is right concerning lexemes copied from Indo-European languages – but those are unlikely to have been on his mind. The passage gives the impression that synharmonism is something which developed gradually during the history of Old Turkic – the facts clearly do not bear out this view.

It is an entirely different (and marginal) matter that the consonant cluster [ñč] appears to front the stretch of the word following it. We find that in *koñčilärkä* in a runiform ms. (ThS I c 5)[236] and in *ïnančläri* in Brāhmī script, in Maue 1996 nr. 29 B6; in this second instance the cluster is also actually spelled *ñc*. This is not at all the situation described above, where the syllables in question appear to be fronted (or at least neutral) sub-phonemically, without influencing subsequent syllables.

The texts are not free from irregularities in synharmonism as far as rounding in Turkic words is concerned, but these are not common. Examples are *kut+ïŋïz+garu* 'to your honour' (M III nr. 9 VII r1), *ädgü+lig* (MaitH X 1r16) or *öt+im+in* 'my advice (acc.)' (U IV D 42). There is a list of such irregularities in Manichæan sources in Zieme 1969: 57, with examples from Buddhist texts added in the note 309 thereto. With binomes such as *ögrünčü+lig+in sävinč+lig+in* (MaitH XX 1r7) or *mün+süz kadag+suz* (M III nr. 22 v1) the irregularity is caused by parallelism, apparently visual parallelism in the second case. In a few instances, /I/ is replaced by /X/ within stems, as *toyunlar* < *toyïnlar* (SP 36) 'monks', *üšüt-* 'to chill' < *üši-t-* (Ernte 24 and Ernte II 2) or *kuru-* < *kurï-* 'to dry' (Ernte 119).

Doerfer 1981: 55 has noted that there are no suffixes with coda /X/, whereas /A I U/ are well attested in this position; nor is there any coda /O/ in suffixes, but this follows from the fact that the choice for /O/ over /U/ in non-first syllables is directly related to the vowel's being

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[236] This instance from Dunhuang does not justify the reading of all Orkhon Turkic instances of *+čI* as *+či*, as done in Tekin 1968: 62-63. There is a punctuation mark between *koñčï* or *koñči* and $l^2r^2k^2A$; either this mark is an error, or what comes after it should be emended to r^2k^2A or *är+kä:* The text says that one set of armour is alotted to this/these person(s). $r^1mk^1čIs^2n^2$ = *armakčïsïn* in KT E6 does not speak for Tekin's view on *+čI* either, as *+(s)I(n)*, the suffix spelled with s^2, does so also when preceded by a back-harmony base.

followed by /k/. This special situation of /X/ demands an explanation, and the two possible ones have already been suggested.

Note also that we have found no suffixes in which onset /I/ or /U/ get dropped after vowels; this appears to happen only to onset /O/, /X/ and /A/. The vowel of the aorist suffix,[237] which has various allomorphs, is lexically determined: We find *-Ar* with most simple stems, most denominal ones and some derived ones, ~ *-Ur* with most derived stems and a few simple ones, ~ *-Ir* with causative stems ending in *-(X)t-*. With (derived and simple) stems ending in vowels the most common variant is *-yUr*. *-yUr* alternates with *-r* (e.g. the numerous instances of *te-r* ‚it says‘ in the IrqB), which could, in principle, come both from *-Ar* and from *-Ur* by the dropping of the vowel: *-Ur* might seem to be the likelier source if one thinks of *-yUr* as letting the hiatus-bridging /y/ precede the allomorph *-Ur* – but there is no hiatus-bridging /y/ in Old Turkic;[238] *-Ar* seems a likelier source since practically all verb stems ending in vowels are either simple or denominal. One could then write this particular realisation of the suffix as *-(A)r*. For this same reason, *-yUr* does not come from *-Ur* through the addition of /y/, but is an allomorph by itself. *+(I)čAk*, an element expressing endearment, may possibly be the only suffix which does drop an onset /I/; see section 3.111. It was probably borrowed from Iranian, however, and evidence for it is quite tenuous.

-(O)k drops its onset vowel also in *kör-k* ‚beauty‘ < *kör-* ‚to see‘, *ör-k* ‘prominent’ < *ör-* ‚to rise‘ and *tur-k* ‚length, height‘ (discussed in OTWF 224-225), since the cluster /rk/ is admitted. This clearly does not happen to *-(X)g*, since we have *sor-ug, sür-üg, tur-ug, ur-ug* and *yör-üg*. *-(U)t* behaves in the same way, with *adïr-t* and its synonym and binome-mate *üdür-t* (both under *adïrt* in the UW), *ägir-t* ‚siege‘, *ur-t* ‚eye of a needle‘ < *ur-* ‚put, place‘ and also *yurt* ‚encampment‘ < Khaladj *yuor-* ‚to sit or stay at some place‘. *ör-t, ber-t* and *kürt* are formed in a similar way. The causative suffix *-(X)t-* / *-(I)t-* equally drops its vowel after /r/, in *adart-, agtart-, bäkürt-, bälgürt-, bïšurt-* and so forth; the examples are quite numerous. The formative *+(X)k-*, on the other hand, retains its vowel after /l/ and /r/, as can be seen, a.o., from *yol+uk-* ‘to come across’ and the very common *bir+ik-* ‘to come together’. The much less common *-(X)k-* fluctuates: Beside the many

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[237] Cf. section 3.233 below. There are more details on these vowels in Erdal 1979b.

[238] Tekin 2003: 78 makes this phenomenon responsible for the /y/ in the suffix *+yA*. That, however, should be an allomorph of the directive/locative case suffix*+rA*; cf. section 3.124 below. ‘*yu-y-ul-*’ in l.1 of the text edited on p.300 of Laut & Ölmez 1998 should better be read as *yuv-ul-*, mentioned as a possible reading in the note thereto.

examples of *tar-ïk-* 'to disperse (intr.)' we find in two pre-classical texts (BT V 494 and Maitr 165v28) the form *tark-*. The single Uygur counterpart of Qarakhanid *balïk-* 'to get wounded' (related to *baš* 'wound' and *balïg* 'wounded') attested in Xw 74 is *balk-*. We cannot say that these vowels were dropped because they belong to an affix; they could also have disappeared due to the (more general) process of the loss of the medial vowels: Note *elit-* ‚to lead' and its common variant *elt-*. *-(X)p* does not loose its onset vowel even after /r/, although /rp/ is an admitted coda cluster: Dropping the vowel would contradict the tendency of having at least one syllable for each inflexional affix. This may originally have been different, taking *tolp* ‚all' to be a petrified *-(X)p* converb from *tol-* ‚to get full'; but the syncopation could also have developed secondarily, when the word was no longer felt to be a converb. As far as inflexional morphology is concerned, stem-final /r/ behaves like a consonant with respect to the dropping of vowels in morpheme juncture; with stem-final /l/ and /n/ this is true also of word formation.

The emphatic clitic *Ok,* the interrogative particle *mU* and the rhetorical particle *gU* of the Orkhon inscriptions follow synharmonism. In Orkhon Turkic, the postpositions *yan* 'in the direction of' (originally a noun signifying 'side') and *täg* 'like' turn into *yAn* and *tAg*, thus assimilating to case status; the former with nouns, the latter in *montag* and *antag*, *bintägi* and *sizintäg*, from the oblique stems of *bo* 'this' and *ol* ‚that', *bän* 'I' and *siz* 'you (pl.)' respectively. This process, which results in morphologization, is limited to Orkhon Turkic as far as *yan* is concerned, but is, with *täg*, carried on in Uygur. The phrase *nä täg* 'like what', also often spelled without space between the two syllables, must have undergone the same process: In *nätäg+lä+ti* (Suv) the phrase is expanded with two suffixes of adverb formation.

2.52. Borrowed stems

The morphophonology of borrowed elements has recently been dealt with in Erdal 2002. Borrowed stems normally get suffixes in back variants also when they have front vowels, in violation of synharmonism rules. This fact, first pointed out in Zieme 1969: 37-8 and elaborated upon by Röhrborn 1988 and 1996, is best observed in texts written in Brāhmī script, which has special spellings for all front vowels; e.g., *asanke+larta* (Maue 1996, 19 nr. 11), *šarmire+larï* and *šarmire+larka* (Maue 1996, 3 Nrs. 78 and 84) or *tetse+larïnïŋ* (ĀṭSū 1 v4). /ï/, the only vowel for which Brāhmī mss. do not have a special

character, is generally spelled like /i/.[239] Where most Brāhmī mss. write *i* in the pre-suffix syllable, this can be read as [ï] as well. Instances such as *ništani+larï* (in Maue 1996 nr. 44b B2), *raši+ta* (TT VIII L32), *jñatiputri+lïglar* (TT VIII G13), *kumbandi+lar* (ĀṭSū 1 v6) or *gandarvi+lar* (in ĀṭSū 3 r2 and v1) and even *indri+lar* (in ĀṭSū 1 r3) are no corroboration of the rule, as their *i* could in fact be
,ï. The pronunciation hidden behind *rṣi+larda* in TT VIII D6 and *arži+ka* 'to the ṛṣi' in BT VIII A 87 was probably *aržï* with °*ï*, because it is twice spelled with *e* in the second syllable in BuddhKat.[240] *nizvani+lïg* (TT VIII E47; also often in Maitr etc.) is likely to have been pronounced with /ï/ for the same reason: We find *nizvanï* (of Sogdian origin) 4 times spelled with *e* in the third syllable in BuddhKat. For texts written in Semitic scripts we can know of the harmony class of a suffix only when it contains the letter X.[241] Consistent back suffix harmony in foreign elements can then be proven either when a stem shows explicit front spelling or when it is otherwise attested in an Indian writing system. A very clear such instance is *čürni+ka* (HeilkII 1,48), whose first vowel is spelled as WY. The reading of *asanke+lïg* (Maitr 90v9 and 192v3, Suv 163,17, TT X 2 etc.) and *asanke+dakï* (DKPAMPb 263, 403) would also be undisputed, as we have this stem also in Brāhmī. Similarly with *den+ka* ‚to the religion' (TT II,1 46), whose base is attested with front vowels in Tibetan script in BuddhKat 26, 29 and 30. In other cases with back harmony in the suffix it is not sure that the base has front vowels even if the word in the source language does. Counter-examples to the rule are rare; such are *šarir+kä* 'to the relic' (MaitH Y 118) and *frišti+lär+kä* (M III nr. 1 I v3 and elsewhere); in the case of *frišti* 'angel' back-harmony suffixation is attested as well (M II 10,4, TT IX 94 and elsewhere).

In a case like *darni+g* 'the spell (acc.)' (Suv 484,17) the second vowel may actually have been transferred into the back class by the X of the accusative suffix (with which it shares the syllable) and become /ï/.

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[239] Only the ms. TT VIII I differs here in writing /ï/ (as well as /e/) as E whereas the letter E in other Brāhmī mss. exclusively represents the vowel /e/ both in Turkic and borrowed words. In this it shows exactly the same practice as BuddhKat, which is in Tibetan writing.

[240] See the previous footnote. /e/ is not to be expected in this word, as the Skt. source has /i/ and not /a/. See Erdal 2002: 20 for its first vowel.

[241] The difference between the so-called 'signal letters' is not reflected in our transcription; we write front or back vowels instead, though this cannot be seen in the ms. if it does not use an Indic writing system.

The second vowel in *v(a)žïr+lïg* (< Skt. *vajra*; TT V A41, suffix spelled with X) was introduced secondarily, and there is no reason to think that it did not follow synharmonism. Similarly *čakïr* < Skt. *cakra* 'wheel', *bavagïr* < *bhavāgra* (discussed in OTWF 16) or *čankïrmit* in TT X 513 (though spelled with K and not X). This latter alternated with *čankramit* in l. 518, whose Sanskrit original did not have any vowel before the /r/ either. The third vowel of this word *could* also, of course, have been /ï/, though we have no way of knowing. The fact that the last three words are spelled with K and not X is irrelevant for the vowel; as pointed out in section 2.34, velar stops in borrowings are not spelled with X even when appearing in back-harmony syllables.

Hence the base of a form like *šaki+lïg+lar* (ShōAgon 3,22; < Skt. *śākya*) could also, influenced by its first vowel, have ended in /ï/ in spite of the spelling with front K. Similarly *čadïklïg* (e.g. TT X 4) also spelled with K, originally from Skt. *jātaka*; the raising of the second vowel would indicate Sogdian origin. *užïk* 'letter' is likely to have had an /ï/ and not an /i/ as second vowel in spite of the spelling with K because a common variant is, in Semitic script, spelled with *alef* instead of *yōd* in the second syllable.

It also happened, on the other hand, that borrowed stems were fronted through the presence of K, possibly by spelling pronunciation. Such cases are *küžäl* ‚nice' ≪ Skt. *kuśala*, *säŋräm* ‚monastery' ≪ Skt. *saṃghārāma* 'monastery" and *Gödäm* ≪ *Gautama. g(ä)rx+kä* 'at (the ascendance of) the planet' (Sanskrit *grāha*) has been read in a Berlin fragment of Suv by Le Coq (the fragment itself is now lost); the onset K apparently caused the fronting.

Bases with back synharmonism practically never get front suffixes: Note runiform $n^1g^1ws^1k^2l^1r^1$ = *nagošaklar* 'lay believers' in ms. TM 332 (KöktüTurf p.1047): The word is spelled with a front k^2 but the plural suffix is *+lar* and not *+lär*.[242] When the base ends with a *caph* (in Turkic units used only beside front vowels), suffix velars adjacent to it can also be spelled with *caph* e.g. in *možag+ka* (M I 33,18; ManBuchFrag 1v6). This spelling practice does not imply reading *možag+kä,* as Zieme 1969: 57 did: The runiform spelling of *nagošaklar*

[242] Mz 386 (TM 333) v1-2 was read as $š^1$'$k^2l^2r^2$:t^1w[g^1']r^1:r^2t^2I in Dispute, interpreted as *[nigo]šaklar tu[g]ar ärti* and translated as '[audi]tors were born'. This would mean that *nigošak* here gets the front variant of the plural suffix. The first character does not at all look like s^1, however, but rather like k^1, and the verb phrase *tugar ärti* would imply durative aspect or a continuous or iterative event, which seems unlikely; besides, babies are not born as auditors. Another possible reading is *]ka k(ä)l(i)r tu[š]ar (ä)rti* 'They were coming to meet (+ dative)'.

shows that the vowels were not fronted. There are counter-examples to this spelling rule as well, e.g *saŋik+ka* (BT XIII 13,81 in two mss.) and *abišik+lïg* with X in the suffix. There is actually quite a lot of fluctuation after coda Ks of the stem; the Uygur counterpart of Skt. *śloka* 'verse' is often spelled with front suffixes but we also have the accusative *šlok+ug* with X in Ht VIII 1924.

Counter-examples where foreign back-vowel words not ending in K are followed by front-vowel suffixes are exceedingly rare. If they are errors, as Röhrborn 1996: 178 (who mentions one of the examples) thinks, they undermine the trustworthiness of Brāhmī evidence for the rule Röhrborn was trying to establish in that paper. Two other such instances are *ugur+dä* in Maue 1996: 3 Nrs. 90 and 96, a few lines from the instance *rajagr+dä* which Röhrborn is there discussing (3 nr. 86).[243] There appears to have been general uncertainty concerning the spelling of learned foreign words, especially those which were probably transmitted in written form by clergy. The rule that they should generally be followed by suffixes of back harmony stands, and exceptions are relatively few.

[243] Maue transcribes *rajagïrdä* while Röhrborn would like to read *rajagirdä*, the source being Skt. *rājagṛha*. Since this is a secondary auxiliary vowel, it might as well be following the harmony of the vowels preceding it; the exception for the suffix would not be all that much of a surprise in view of the double *ugurdä* in the same passage.

CHAPTER THREE

MORPHOLOGY

Morphology deals with bound morphemes, their use, their functioning and meaning and the way they alternate in order to express grammatical categories. The description of most grammatical categories is included in this chapter, since these are in Old Turkic generally (though not always) expressed by morphological means. Morphology also comprises word formation in so far as the products of this part of grammar are by no means all to be found in the lexicon; many derived lexemes (e.g. such as are formed with adjectivising *+lXg* or with the suffix *+kIñA* used for endearment or with the suffix *-(X)š-* expressing cooperation or vying) are clearly ad hoc products, not meant to be remembered by the speaker / writer or by the hearer / reader.

Old Turkic bound morphemes are practically always suffixes; the only exception is the expressive reduplication of adjectives, where the first one or two phonemes are repeated with the addition of a further consonant (section 3.112 below and OTWF section 2.23). Old Turkic suffixes generally adhere to synharmonism (see section 2.51 above), which serves as an important boundary marker for the word. Particles like *(O)k* or *mU* are, however, taken to be outside the word (i.e. not to be suffixes) even though they also adhere to synharmonism. The reason for this is that a class of word stems (lexical as e.g. verbs or grammatical as e.g. personal pronouns) is defined by the set of suffix paradigms that it allows,[244] and suffix paradigms are, in turn, defined among other things by the classes of stems to which they get appended. *(O)k* or *mU*, however, can get appended to all classes of words or word groups (and never to stems as such); moreover, they are not followed by bound morphemes (as e.g. the plural suffix *+lAr*, which in Uygur is used both with nouns and verbs). When postpositions or other elements get synharmonic, they are nevertheless considered to have become suffixes (as happens with *täg* 'like' or, in Orkhon Turkic, with the noun *yan* 'side'): They acquire characteristics of case endings applying to a limited set of lexeme classes.

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[244] Exceptions to this are very rare. One example is the expression *bir ikintiškä* 'one another'; the second word of this common phrase clearly consists of *ikinti*, the ordinal of *iki* 'two', of the dative suffix *+kA* and, between the two, of what at least looks like the verbal cooperative-reciprocal suffix *-(X)š-*.

Old Turkic suffixes generally appear in neat chains and each of them is expressed by a neat chain of phonemes (often alternating within archphonemes); this is what is meant when stating that this is an agglutinative language. Morpheme juncture procedures are described in section 2.51 above; see also Erdal 1979a.

A morphological class of lexemes (generally corresponding to a part of speech) opens a chain of morphological slots, which can be filled by suffixes or left empty. A slot left empty may have a specific meaning ('zero'); this generally happens with verb stems, in that, e.g., the absence of verbal suffixes indicates that the form is to be understood as 2nd person singular imperative. Or it may have no meaning at all, as e.g. with the slot of possessive suffixes on nouns: The absence of possessive suffixes does not mean that the entity belongs to nobody, or that it belongs to the (unmarked) 3rd person. Here is an example for what I mean, from verbal morphology, where possessive suffixes can refer to the subject of the verb: *bunča esig küčüg bertökgärü sakïnmatï türk bodun ölüräyin urugsïratayïn ter ärmiš* (KT E10). This sentence can be translated as follows: 'They (i.e. the Chinese) used to say "Let us kill and exterminate the Turk nation", not taking into consideration that (we) gave (them) so much service'. The context tells us that the subject of *esig küčüg ber-* is the Turks; since these are the Turk ruler's words, 'we' and not 'they' is appropriate although not indicated by the morphology of *bertökgärü* or anywhere else in the sentence. Nor is the indirect object of *ber-* 'to give' explicit; we know it from the context, which the addressee's understanding is made to rely a lot upon by Turkic economy.

3.01 Suffix ordering

The suffixes closer to the stem are, in general, derivational, while those further away are flexional. This is so with verbs, where everything preceding the slot for the negative suffix *-mA-* is derivational (though not necessarily lexicalized). With other parts of speech, it can happen that suffixes here considered to be derivational follow inflexional suffixes, suffix juncture being in general weaker in non-verbal stems.[245] In the rest of this section we will give examples for cases in which

[245] Affixes dealt with under 3.28 below transpose verbal stems (including the affixes preceding them) into a non-verbal class; from the morphological point of view, the product then behaves as any nominal, as a morphological island, as it were. This is not what is below referred to as a morphologically un-normal phenomenon.

certain relatively loose derivational suffixes (all dealt with in section 3.111 below) follow inflexional ones.

In *ikinti+siz* (Maitr 48v7) 'peerless', literally 'which has no second', e.g., the privative sufix is added unto the ordinal form *ikinti* 'second'. In a case like *beš paramït+lar+sïz* 'without the five *pāramitās*', (BuddhUig II 641-2), *+sXz* governs the whole nominal phrase consisting of two words, the number (and hence the plurality expressed by *+lAr*) of the *pāramitās* being characteristic for these. It is much more common in relatively late texts (as BuddhUig II is) for *+lXg* to be added to nominals with the plural suffix; here just one example: *amrïlmïš turulmïš arxant tïtsïlarlïg ayagka tägimlig bursaŋ kuvrag* (Shō VII a1) 'the venerable community consisting of *arhats* and pupils, who have attained peace'. *kIñA / +k(I)yA* is also very often added to whole phrases and is, in this, close to being a pragmatic particle;[246] in *bir kšan+ta+kya* 'in a mere fraction of a second' (BuyKäl 32 and 35) it thus comes to stand after the locative suffix. The equative and instrumental suffixes often precede derivational suffixes: e.g. *änätkäk+čä+sig* 'similar to the Indian ones' (Ht V 4b11) with *+sIg*, *az+rak+ča+kya* 'just a tiny little bit more' with the diminutive suffix.[247] We find *tärk+in+räk käl-* 'to come rather fast' (DreiPrinz 26) with the instrumental followed by the elative suffix, and *bir üd+ün+kyä* 'for a very short moment' (U II 75,8$_2$) with the instrumental followed by the diminutive suffix. *+lXg* often appears after the 3rd person possessive suffix, and even after the 1st person: *atï kötrülmiš kaŋ+ïmïz+lïg m(a)xasamudar ulug taloy ögüz* (BT III 122) 'our eminent father (i.e. Buddha), the great ocean'. Comparing the morphological involvement of *+lXg* with that of *+kIñA* we find great differences, linked to the fact that, though both are juncturally quite independent, they differ in every other respect; the two are in complementary distribution: *+kIñA* is attested after case suffixes, *+lXg* not; we do, on the other hand, find *+lXg* after number and possessive suffixes, where we have no *+kIñA*. This must be connected with the fact that the tasks of *+kIñA* are endocentric, those of *+lXg* exocentric: *+kIñA* has an extremely strong speaker significance, *+lXg* an exceedingly pale one; *+kIñA* does not, on the other hand, interact with syntactic behaviour while *+lXg* interacts with syntax very strongly.

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[246] As *+lXg* can be considered to be a syntactic particle in relatively late Uygur sources. See details on the use of *+kIñA* in OTWF section 2.1.

[247] Other such instances are *tap+ïn+ča+kya, täŋ+in+čä+kyä, uz+ïn+ča+kya, u-mïš+ča+kya* 'just as much as one is able to', *an+ča+kya* 'that little' and *mun+ča+kya* 'this little'.

3.02 Bracketing

Inflexional or derivational suffixes are frequently appended to phrases or other syntagms. A few examples for this were quoted in the previous paragraph: *(bir üd)+ün+kyä* 'for a very short moment', *(bir kšan)+ta+kya* 'in a mere fraction of a second', some complex instances with *+lXg*[248] and *(beš paramït+lar)+sïz* 'without the five *pāramitās*'; here is an even more involved instance with the privative suffix: In *ančakya münägülük münsüz ärip* ... (ETŞ 15,30) 'You are free from even the smallest fault to be blamed for' *mün* (by itself) is qualified by the 'small clause' *münä-gülük* 'to be blamed' and by expressive *ančakya* 'so little', and the whole serves as base for *+sXz*.

3.03 Group inflexion

In a way related to the above but still to be considered as a distinct phenomenon is the situation where affixes added only to the last element in a series are understood to apply also to the previous parallel members, as the first plural suffix in the following: *känč urï känč kïzlar körkin körü kurtulgu tïnlïglar* (Kuan 139) are 'beings which are to be saved by seeing the figures of young boys and young girls'. The vision to be seen by each being may here consist of a single boy or girl or of more than one, but is unlikely to consist of a single little boy but a number of little girls; i.e. the suffix *+lAr* must apply both to *kïz* and to

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[248] Here are some additional ones: *bir yintäm* 'exclusively' (see OTWF 69) must come from *yin* 'member', but the etymology makes semantic sense only if one considers the formative *+dAm* (dealt with in OTWF section 2.31) to have here been added to the phrase *bir yin* 'one member'. *bir yaŋlïg* 'uniform' similarly comes from adding the formative *+lXg* to the phrase *bir yaŋ* 'one type', *bir išdäš* 'having a common cause' (especially common in the Kšanti Kïlguluk nom, edited in separate parts by Röhrborn and Warnke) from adding the formative *+dAš* to *bir iš* 'one *karma'*. *+sIg* (OTWF section 2.32) is also added to bracketed nominal phrases in *(öŋi yer)+sig ak-* 'flowing as if at different places (of a river)' (HtPek as quoted in UW 78) and *(tümän mïŋ tü)+sig* 'as if in thousands of myriads of shapes' (QB 829). In *akar suvluk* 'an area, a place with flowing water' (ETŞ 8,4), *+lXk* is added to a participle + head. The second phrase of *körümči ulatï tärs tätrü töröči* (TT VI 331) 'diviners and other followers of wrong teachings' is to be analysed as *(tärs tätrü törö)+či*; *+čI* would not make sense when added to *törö* 'teaching' by itself. Similarly *nomlarnïŋ (čïn kertü töz)+süz+in ... bilirlär* (Suv 386,7) 'They know that the dharmas are without any real root'. The phrase *bir ägsüksüz* is used in contracts (e.g. UjgRuk 19, FenTen II 5) as a synonym of *tükäl* 'complete(ly)': It has *+sXz* added to the predicate of the clause *bir ägsük* 'one is missing', giving 'not one missing'.

urï.[249] In *bi*[250] *bïčgu kïlïčïn bïčïšurlar* (Maitr 171v2 = MaitrH XX 1r21) 'They cut each other with awls, knives and swords' the shared element is the instrumental suffix. With the locative case suffix we can quote *ol yäkniŋ üstün täŋri altïn yalŋukta kim ärsär küčin tïdtačï yok* (TT X 104-106) 'There is nobody either among the gods above or among the human beings below who restrains the power of that demon'. As in the previous example, the elements *üstün täŋri* 'gods above' and *altïn yalŋuk* 'men below' are not bracketed; they do, however, constitute a natural antithetical pair and not merely coordinated elements of a sentence. This is not the case in the instances in the following passage: *kišig ... yinik körtäči, nomug učuzladačïlar üčün, anïn burxanlar anta tugmaz; köŋülläri tar, kirläri täriŋ üčün kut bulmïš tüzünlär bo tïltagïn anta barmaz* (Ht V 100-106) 'Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their minds are narrow and their filth deep, for that reason *āryas* who have found blessing do not go there': Both pairs have the postposition *üčün* in common but in the first pair the plural suffix is also shared. In *iki kutlug el[ig]lär kamag tegitlärin kunčuyl[arï]n tözünlärinlugun* (DreiPrinz 119) 'the two blessed kings together with all their princes, wives and retinue' the case suffix is shared but the oblique or accusative form of the possessive suffix is not; this and the fact that it does not, for some reason, adhere to synharmonism make it similar in behaviour to a postposition.[251] The accusative form of the possessive suffix is shared by a binome in *bäksiz mäŋüsüzin ukup* (MaitrH XV 5r27) 'he understands (their) transience and ...'. The plural suffix can be shared also by finite verbs, as in *alku ayïg ögürdi sävintilär* (SP 39) 'They all rejoiced greatly'; *ögir- sävin-* is a biverb. It would have been unthinkable for the verbs to share a verbal suffix such as *-dI*.

3.04 Parts of speech

There is a sharp distinction between verbs on the one hand and the other parts of speech on the other: While unbound elements are often found

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[249] One ms. among four writes *urïlar* here, but leaves *urï* in line 140, where a similar expression appears.

[250] Spelled BYY? The editors of this chapter of the Hami ms. write *biri*, which gives no meaning. No facs. of the page where this word appears reached Europe; the text of this passage is based solely on the transcription of Prof. Geng, who may have made a mistake. *biiz* 'awl', another possible interpretation of what Geng may have seen, here admitted into the translation, is less likely because *bi bïčgu* is a common binome.

[251] The possibility that *tegitlärin* and *kunčuyl[arï]n* are not accusative but instrumental forms seems less likely to me.

to belong to two, often even three among the other parts of speech (noun, adjective, adverb, postposition, conjunction etc.) and borders between noun and adjective, adjective and adverb, adverb and postposition, pronoun and conjunction etc. are rather fuzzy, verb stems very rarely serve as anything else. This is the position, among others, of Grönbech 1936: 18-19, who points out that there may be coincidence between verbs and nominals in some cases, derivation through homophonous suffixes (e.g. *-(X)š-* and *-Xš*, *-(X)n-* and *-(X)n*) in others, but that verbs and all other lexeme classes are in principle clearly distinct. One might add that convergence may also have had some influence, verbal and nominal stems which happen to be similar in meaning and shape having drawn even closer as they got associated with each other by speakers. Doerfer 1982 gives a long list of entities he considers to be 'Nomenverba'; one obvious Old Turkic example is *karï* 'old' and *karï-* 'to get old'. There are a number of such clear instances, though a part of Doerfer's list must certainly be rejected as the actual meanings are in fact not all too close. In any case, the phenomenon is of etymological though not of grammatical relevance (unlike in English or Chinese).

Morphology has here been divided into four groups: the nominals (also comprising adjectives, pronouns and numerals), verbs (comprising verb forms transposed into other classes, i.e. participles, converbs etc.), adjuncts (comprising adverbs, postpositions, conjunctions and particles) and interjections.

3.1. *Nominals*

Nominals are lexemes which can serve as heads of noun phrases and are thus capable of reference. As a morphological feature, all nominals can receive case suffixes. The term covers nouns (including proper names), adjectives, pronouns and numerals. We speak of 'adjectives' as a special sub-class because there is an (admittedly fuzzy) semantic distinction between the two classes: Adjectives tend to denote qualities and are used for referring less frequently than nouns. They also have a lot in common with adverbs. Furthermore, the stem of gradable adjectives can be reduplicated or they can get expanded by *+rAk*,[252] none of which is possible with nouns. There also are formatives such as *+sIg* specifically forming adjective-type lexemes, and *+lXg* more often

[252] See section 3.112 for procedures of intensification.

forms adjectives than nouns. Colour adjectives, finally, have special formatives.

The following typologically important characteristic is, however, a challenge to the distinction between nouns and adjectives: Lexemes denoting semantical predicates serve as abstract nouns as well, i.e. they not only qualify entities identified by bearing the predicate but also refer to the abstract quality denoted by this predicate. In the latter case they usually get a possessive suffix referring to the bearer of the quality in question, as *ädgü+si* 'her goodness', or *keŋ+in täriŋ+in* (poss. 3. sg. accusative) *tüpkärgäli* (BT I A_2 12) 'to fathom its breadth or its depth'. Thus *ädgü* is attested both as 'good' and 'goodness', *bil-gä* both as 'wise' and 'the quality of being wise, one's wisdom' while *yer suv ärtimlig+i* is 'the transience of the material world' from *ärt-imlig* 'transient'. The agentively derived *armak+čï* can signify both 'deceitful (person)' and '(somebody's) deceit'; Orkhon Turkic *armakčï+sïn üčün* (KT E 6) is not 'for his deceiver' but 'because of its (i.e. the Chinese nation's) deceitfulness'. *yavlak* is both 'bad' and 'badness, wickedness'; in the inscriptional sentence *karluk yavlak sakïnïp täzä bardï,* it may, moreover, also have been used in adverbial function (unless it signifies 'bad thoughts'). *körgäli umazlar anïŋ täriŋ+in* (Ht VIII 42) signifies 'They are unable to perceive its depth', *täriŋ* 'deep' having been used as abstract noun; alternately one could translate 'They are unable to see how deep it is'. In *tükäl bilgä täŋri burxan yarlïkamïš köni kertü nomnuŋ tïnlïglar bo montag yegin adrokïn bilzünlär* (TT X 558) one can translate *yeg+i adrok+ï* as 'its superiority and excellence' or as 'that it is superior and excellent'. *kičig+im+tä* (BT VIII A 163) from *kičig* 'small' is 'in my childhood', *kičig+kyä+m+tä* (Ht) 'in my earliest childhood'. The following DLT proverb shows *ägri* both as 'bentness' and as 'bent': *yïlan kändü ägrisin bilmäz, teve boynïn ägri ter* 'The snake does not know its own bentness (i.e. how bent it itself is) and calls the camel's neck 'bent'.' All this explains how *+sXz* 'without' denotes lack when added to lexemes normally used nominally, but antonymy when added to adjectives: Examples for abstract *+sXz* forms (not necessarily with any possessive suffix to refer to the bearer of the quality) are mentioned in OTWF 133. Further, it explains why *-mIš* or *-gAn* form only participles (i.e. verbal adjectives) in some modern Turkic languages and action nouns (i.e. verbal abstracts) as well in others; why some languages can have one and the same infinite verb form in both of these uses; how the *-(X)p* converb could come to form the head of analytical finite verb phrases (in Azeri). In *tirig+dä+ki+čä*, which signifies 'as in one's lifetime', *tirig* 'alive' is not just 'life' but

rather 'somebody's being alive'; hence a syntactic expansion like *atalarï ölmiš+tä+ki+čä* (ms. T III 228 1029) can signify 'as when their fathers had died': *ölmiš* does not refer to those being compared but to their fathers. What here becomes an abstract nominal is the whole phrase *atalarï ölmiš*. To return to adjectives as lexemes: It can be stated that their three-fold versatility, the ability of describing qualities on the one hand, of denoting, on the other hand, these qualities themselves *or* their bearers, is what defines them as a word class (cf. Johanson 2003).

Another way to create abstracts was by prop words like *köŋül* or *bilig*: *sïmtag* is both 'careless, neglectful' and 'neglect, carelessness'. 'care' or 'carefulness', its opposite is *sïmtagsïz köŋül* (see OTWF 203). *küvänč köŋül* is 'pride, arrogance' (while 'a proud and arrogant state of mind' is *küvänčäŋ köŋül*). Similarly *öfkä bilig* 'anger' or *yarlïkančučï bilig* 'commiseration' from *yarlïkančučï* 'compassionate'.[253]

Pronouns are also nominals; elements such as *öz* form a bridge between nouns and (referring or adnominal) pronouns in serving as both. Old Turkic numerals can also be assigned to the general category of nominals, although they have special morphological categories; their syntactic characteristics are shared by quantitative adjectives.

The Old Turks derived proper names both from verb and from noun forms: Lexemes denoting animals, often birds, were commonly used as proper names, as were adjectives of positive content. Imperative verb forms often serve as proper names.[254] Male and female proper names often get an element *+A* added to such imperatives or to simple nouns or adjectives, as *Togana* from *togan* 'falcon', *Tükälä* from *tükäl* 'perfect' or *Kutada* from *kut+ad* 'Be happy, blessed!'. Diminutive / caritative forms also serve as proper names. Phrasal names such as *Tirigältmišä* (SUK Wpo2,11) < *tirig ält-miš +ä* 'brought forth alive' are not rare.

This chapter starts with the formation of nouns and adjectives: Nominal stems can be derived from other nominal stems or from verbal stems. The former are discussed in section 3.111, the latter in section 3.112; see OTWF vol. 1 for more details on nominal derivation. We subsequently turn to the inflexional morphology of these lexical classes.

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[253] *+lXk* is used for forming abstracts in Qarakhanid only, Uygur examples being rare and late; in OTWF 126 this is explained by the fact that Uygur was a contact language with Chinese, which Qarakhanid wasn't. Here, nevertheless, is an instance from a letter, a text type notorious for introducing progressive forms: *ävdäkilärtin ... enčlik äsänlik ayïdu ïdur biz* (UigBrief C5) 'We inquire about the well-being of those at home'; see OTWF 126 for a few additional examples. The matter is discussed in Röhrborn 1995.

[254] E.g. *Üdrät* 'Increase (tr.)!', *Asïl* 'Multiply (intr.)!', *Üklit* 'Make numerous!', *Kantur* 'Make glad!' or *Tusul* 'Be beneficial!'.

3.111. Denominal derivation of nominals

Nominals are formed from other nominals for certain specific purposes: Derived nominals can express smallness, endearment or pity (OTWF section 2.1); nominals (especially adjectives) can be intensified (OTWF section 2.2); nominals can be formed which express similarity of some sort with the base nominal (OTWF section 2.3); nominals can be marked for a class to which they are said to belong (OTWF section 2.4); derived nominals can express collectivity (OTWF section 2.5); they can also express certain functions related to the base noun (OTWF section 2.7) or characterisation by the base noun (OTWF section 2.9). Denominal derivation can express presence or absence of the entity denoted by the base (OTWF section 2.8) or, finally, serve syntactic purposes (as with the suffix *+lXg*).

There are two productive diminutive suffixes: *+(X)č,* added for endearment to terms for family members, and *+kIñA / +kIyA* used e.g. for pitying or affectionate reference to children and other beloved or cherished creatures. *+(X)č* is, in the great majority of cases, used with 1st person possessive suffixes, e.g. *ög+üč+üm* or *ög+üč+ümüz* ‚my / our dear mother' (six times BT XIII 12, BT IX 219,2$_3$), *yäŋä+č+im(iz)* ‚my / our dear sister in law' (FamArch 126 and HamTouHou 20,2). *kaŋ+ič+iŋ+ka* ‚to your dear father' (MaitrH XI 12r13) is a rare instance with the 2nd person possessive. *ata+č+im* 'my dear father' and *ana+č+im* ‚my dear mother' with the colloquial words for 'father' and 'mother' are especially common, the first of these since the runiform inscriptions; see the *UW* for Uygur examples of these two.

A rare suffix of endearment of the shape *+(I)čAk* may be attested in *kol+ičak* and *boto+čak*: *iki kolïčakïn atasïn boyn[ïn] kučup ...* (U III 64,13) '(the poor child) hugged his father's neck with his two little arms and ...'; *botočaklarïmïn karnï ačmiš* (BT XIII 2,39) 'It seems that my little camel colts (said in endearment about children) are hungry'. See OTWF 46-47 for several words which may be formed with similar suffixes.

While *+(X)č, +(I)čAk* and the suffix *+kIñA*, to which we turn straightway, are of pragmatic use in the sense that they express the speaker's feelings towards the entity he is referring to, the suffixes *+Ak* and *+Ik* do not go beyond the lexicon: They denote entities which are, as it were, a smaller version of what is denoted by the base. *kapak* and *čanak*, e.g., are vessels which are smaller than *kap* and *čan*; from *yul* ‚spring' we have *yul+ak* (Maitr 139r12 and v20), defined by Kāšġarī as „a spring with little water". *öz* and *özök* appear to be ‚water ways' related in a similar manner. With animal names the relationship

between base and derivate seems to be more imaginative: *kamïčak* ‚tadpole‘ < *kamïč* ‚ladle‘ because of its shape, *oglak* ‚kid‘ < *ogul* ‚son‘, *adgïrak* ‚white-footed antelope‘ < *adgïr* ‚stallion‘ and the like. *topïk* ‚ankle bone‘ < *top* ‚ball‘, *čöp+ik* ‚impurity‘ < *čöp* ‘little stick’, *kas+ïk* ‚piece of bark‘, *but+ïk* ‚branch‘ < *but* ‘leg’ appear to be formed with a different formative, *+Ik*.

+kIñA, the most productive diminutive / caritative suffix,[255] becomes *+kIyA* in Uygur or, less commonly, *+kInA* (e.g. *azkïna* ‘very little’ in KP 7,6 and a few other examples; see section 2.33). With terms referring to the speaker/writer, *+kIña/+kIyA* expresses modesty and self-depreciation. It sometimes also appears with adjectives and adverbs denoting smallness, shortness of time and the like by themselves (as *azkïna* just mentioned). *+kIyA* / *+kyA* is added to inflexional forms or to whole phrases; e.g. *bir kšan+ta+kya ymä* ‘even in just one moment (*kšan*)’ (BuyKäl 32) or *bizni täg yüz yaš+lïg+kya+lar,* which its context shows to signify ‘people like us, who just get to be a hundred years (*yaš*) old’ (BT II 936). It is in some ways similar to a particle (note also that Kāšġarī does not quote any words formed with it, presumably because its products are not distinct lexemes); this double nature of being a formative preceding all inflexion on the one hand, of being like a particle both formally and semantically on the other hand, is retained in some modern languages where it lives on, like Uzbek and Bashkir.

+sIg forms adjectives signifying ‘similar to (or trying to be like) the base nominal’, as in *öŋi+sig* and *adïn+sïg* ‘distinct’, *bar+sïg* ‘as if existing’, *ulug+sïg* ‘vain’. The formative *+dAm* (as in *täŋri+däm* ‘divine’) appears to have a similar meaning.

+AgUt forms status designations, as the very common *bayagut* ‘merchant, notable’ and *alpagut* ‘warrior’. The form also appears in binomes with underlying nominals, as *bay bayagut, baš bašagut* ‘foremost (pupil)’ (Maitr 160v2) or *uz uzagut* ‘specialist’ (ManMon 30).

Colour names have special derivates, formed with suffixes such as *+gXl, +sIl* and *+Xš*; see OTWF section 2.6. *+(l)dUrXk* forms names of implements spatially connected with human or animal body parts, such as *boyunduruk* ‘yoke’, *beldürük* ‘belt’, *sakalduruk* ‘cap strap under the chin’. *+(l)dUrXk* appears to have had a variant *+(l)dArXk* now attested in *karï+ltarak* ‘upper arm bracelet’ in DKPAMPb 1138 (r and v confused in the facs.).

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[255] It also seems to be the only originally Turkic one: All the suffixes mentioned hitherto apparently come from Indo-European (though this is not the place to go into details on etymology).

+lXk forms derivates with a variety of meanings and functions (as also nowadays in many Turkic languages), which get lexicalised to different degrees; however, all of them have the general relational content of 'purpose, assignment' in common. *+lXk* is also part of the inflexional suffix *-gUlXk,* which forms modal action nouns and projection participles and is dealt with in section 3.284. Firstly, *+lXk* forms adjectives and adverbs pointing to the future, which are derived from bases denoting stretches of time: *bïŋ yïl+lïk tümän kün+lük bitigimin bälgümin ... yassï taška yaratïttïm* (ŠU E9 and Tariat W2) 'I had my written words and my mark, intended for thousand years and ten thousand days, affixed onto a flat stone'. Similarly *apamu+luk b(ä)lgü tamga* 'a mark and seal for eternity' (HtPar 232,14), *tümän kalplïk adrïlurlar* 'They get separated for a myriad of *kalpa*s' (Warnke 484), *oglumnï Čïntsu Šilaka üč yïl+lïk tutgok bertim* 'I gave my son as a slave to Č.Š. for three years' (UjgRuk I 4) and so forth. Secondly, *+lXk* forms adjectives denoting a status, use or function assigned, or to be assigned to a human or any other entity: *bäg+lik urï ogluŋ kul boltï, esi+lik kïz ogluŋ küŋ boltï* (KT E34) 'Your sons, meant to be lords, became slaves, your daughters, meant to be ladies, became concubines'. A Manichæan example is *anvamïg yutuzluk al(ï)nïŋ* 'Take yourself A. as wife!' (M III 14,4$_1$); further *bäglik är* 'a man to be lord and master' (U II 21,14), *teginkä kulluk barïr biz* 'We are going to the prince to serve him' (KP 23,3), *bušïlïk ärdinilär* 'jewels to serve as alms' (U III 12,15), *tapïglïk tavar* 'object to serve as a token of respect' (Ht VII 2051). Thirdly, *+lXk* nouns denote places intended for entities as denoted by the base noun, or where such entities are found in abundance, as *borluk* 'vinyard', *čäčäklik* 'flower garden', *kalvalïk* 'vegetable garden', *agïlïk* or *xömsölük* 'treasury',[256] *yagïšlïk* 'a place for sacrifices' or *täŋrilik* 'a temple'.

+dAš lexemes denote persons (exceptions are quite rare) who are companions to the entity denoted by the base noun or have that entity in common. Uygur instances are *nom+daš* 'a person adhering to the same faith (*nom* << Greek *νόμος* 'law') as one's own' or *körk+däš* 'a person's shape-fellow' or 'shadow soul', which becomes visible in a mirror or a drawing (*körk* 'shape' < *kör-* 'to see').

The denotees of *+čI* nominals are persons who are habitually or professionally engaged in an activity in some way involving the

[256] Etymologically speaking, the suffix of the last-mentioned is unnecessary, as *xömsö* already signified 'granary' in Chinese; the DLT also gives *kömčö* as 'treasure'. In copying between languages, categorial transparency is commonly revived through additional affixes; e.g. Turkish *evlat+lar* 'children' < Arabic *awlād* 'children'.

denotee of the base. This formation will here be dealt more in detail than the other formations, as it became very active in the participle domain (see section 3.282 below). The implied activities in which the base is involved can be quite diverse. *suv+čï* is a 'sea pilot' in KP 22,4-5 but a 'water superintendent' in USp 88,46, *ok+čï* clearly an 'archer' in QB 2370 but an 'arrow maker' in QB 4458, *sav+čï* is a glorious title in PrièreMan A 9 but has a clearly negative meaning in TT IV B 21; *yagï+čï*, finally, is just 'a quarrelsome person' in Maitr 82r26 but 'a soldier' in all its eight QB instances. Such examples might suggest that *suvčï, okčï, savčï* or *yagïčï* are not entries in the mental lexicon but created each time according to the context's needs.

yagïčï just mentioned, *küniči* 'a jealous person', *övkäči* 'bad tempered' and *buyančï* 'meritorious' label people by their qualities rather than their profession.[257] There is a wide variety of implied verbs: *tamgačï* (earliest in KT N 13) is the person who *bears* the royal seal and *uses* it. A *titigči* is a man who *makes* mud (*titig*) walls and an *aščï prepares* food. An *altunčï*, *sasïčï* or *tämirči use* the denotees of the bases (gold, clay and iron) as material to *make* objects; thus also *ïgaččï*, as we understand from the context. In other contexts, *ïgaččï* could be a tree *cutter*; a *targakčï makes* or *sells* combs. A *tuzčï collects* and/or *sells* the object (salt) while a *bözči makes* or *sells* it (cotton cloth). A *kalančï* is somebody who *does agricultural work* for the state *instead of paying* the *kalan* tax. The *ävči* 'housewife' and the *borlukčï* 'wine grower, wine cultivator' (not the owner of a vinyard) *work in* the place denoted by the base. A *yultuzčï looks* at his object (stars) to *predict* the future while the *yuntčï, koñčï, udčï* and *yaŋačï* have terrestrial objects (horses, sheep, bovines and elephants) to *watch* and *tend.*

+čI nouns practically always denote humans[258] who are initiators of events or activities: *kämiči* and *kaŋlačï* are people who sail and drive ships and carts respectively, not passengers on these vehicles. The *tïŋčï* (U II 8,37 and TT IV A 21) is not a listener (as one might think in view of the derivate *tïŋla-* 'to listen'), but the person who communicates things to be listened to; *kapagčï* is a 'doorkeeper', not somebody who is locked in or out by a door. *+čI* often forms derivates from names of activities; thus *avčï* 'hunter' < *av* 'hunt', *oyunčï* 'player' < *oyun* 'game',

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[257] So do the very common *yarlïkančučï* 'compassionate' and its rare near-synonyms *irinčkänčüči* and *sakïnčučï* (see OTWF 114-5), which can be considered to be deverbal as no corresponding *-(X)nčU* forms are attested. Thus also *armakčï* 'deceitful person' (already KT E6), which comes from *ar-mak* 'deceit' and not from the verb.

[258] I have met only one instance where the referent is an animal: *kan+čï kurt* 'a leech' in a Brāhmī text, from *kan* 'blood'.

sïgïtčï ‘wailer’ < *sïgït* ‘lamenation’ or *yelviči* ‘sorcerer’ < *yelvi* ‘sorcery’. This makes derivates from denominal verbs, e.g. **oynagučï* or **sïgtagučï*, superfluous. Agentivity was a central characteristic of this formative already prehistorically: This is what made it part of the highly productive agentive formatives *-(X)gčI* and *-gUčI* dealt with in the section 3.113, and presumably also of the subject participle *-dAčI* (section 3.282), which serves as future form in Orkhon Turkic (section 3.234).

Not all combinations of deverbal formatives with *+čI* fused into deverbal formations. Two such formative sequences are mentioned above; another two are *-(X)m+čI* (e.g. exceptionally not all too agentive *ölümči* ‘creature doomed to death’) and *-(X)š+čI* (e.g. *tütüšči* ‘quarreler’, *öčäšči* ‘contender’ or *turuščï* ‘opponent’). *közütči* ‘guardian’, one of the products of the *-(U)t+čI* sequence, governs objects, just as *-(X)gčI* and *-gUčI* do; e.g. in the common expression *yertinčü küzätči*, a loan translation from Skt. *lokapālā* ‘guardian of the world’.

+sXz denotes lack when added to nouns. When it is added to adjectives it signals their non-applicability, e.g. *bäksiz* ‘infirm’, *mäŋüsüz* ‘transient, not eternal’, *čïnsïz* ‘untrue’, *adïnsïgsïz* ‘immutable’. *bägläri bodunï tüz+süz üčün* ‘since the lords and the people were in discord’, *bir ägsüksüz tükäl* ‘without (even) one missing (i.e.) complete’; *ät’öz ürlüksüzin ukïtu* ‘explaining the body’s transience’ (< *ür+lük* ‘everlasting’) or ‘teaching that the body is transient’. In the Tuñokok inscription, (but not e.g. in the KT and BQ inscriptions) *+sXz* could have had the shape *+sIz*, as it is written with s^2 in Tuñ 48, and in the instrumental form in Tuñ 35 as s^2zn^2. This accords with the first vowel of the suffix *+sIrA-* ‘to be or become without (the base noun)’, which is derived from the privative suffix using the formative *+A-*.

+lXg was, in the Orkhon inscriptions, a formative signifying ‘possessing the denotee of the base’, as in *küčlüg* ‘powerful’, *küŋlüg* ‘having female slave(s)’, *xaganlïg* ‘having a *xagan*’. In Uygur it has a wide variety of uses, indicating, e.g., origin (*Solmïlïg Alp Totok Ögrünčü*), material (*kümüšlüg tirgüklär* ‘silver-plated pillars’), apposition (*täŋri kïzlarïlïg terin kuvrag* ‘the assembly of god-maidens’) or metaphor (*nizvanïlïg kir* ‘the dirt of passions’), and governs some very involved constructions partly described in section 4.122 below (see OTWF section 2.91 for a full treatment). *+lXg* is sometimes preceded by *+lAr* or by possessive suffixes; examples are given in section 3.01. Interestingly, it is preceded by the 3rd person possessive

suffix in the shape which we find before postpositions; e.g. in *burxan kut+ïn+lïg kölök* (Pfahl I 8), where a 'vehicle' (Skt. *yana*) is presented as a metaphor for Buddhahood. *+(s)In+* might then be the shape which the possessive suffix has also when it precedes derivational elements and not only postpositions (the only one attested in this position being *+lXg*). In another appositional instance of *+lXg*, a personal pronoun also appears in the shape it has before postpositions, which is (as with the possessive suffix) identical with the accusative: *biznilig erinč tïnlïglar* (UigOn III B r3) 'us poor creatures'. Another possibility is that *+lXg* was really felt to be a postposition, since it has such loose juncture in Uygur (cf. OTWF p.151). In other cases, however, we have the possessive suffix appearing without /n/ before *+lXg*; for this there might again be two reasons: Along with other changes in Uygur, this /n/ was dropped also before postpositions (section 3.124), and the instances without /n/ might be part of that historical development. As a different possibility, *+lXg* may have come to be felt to be a concatenating particle, and particles never demand this oblique form of what precedes them.

3.112. Intensification of adjectives and adverbs

Intensification applies to adjectives and adverbs but not to nouns, except the use of the clitic particle *(O)k* (can modify any textual entity; cf. section 3.341). *+rAk* forms elatives and comparatives. It might be a particle rather than a formative as it practically never forms lexemes, as its products do not differ from their bases in lexical content, as it hardly ever is followed by formatives but sometimes appears even after inflexional morphology. *+rAk* is added to adjectives (e.g. *yarprak sav* 'quite difficult phrases') and adverbs (e.g. *ašnurak* 'before, earlier') but not to colour terms, which are graded by reduplication. *+rAk* forms govern the case form in *+dA*: e.g. *ay täŋri tilgänintä sävigligräk* 'lovelier than the moon disc' (comparative); *barčada ičgärüräk barčada üzäräk* (BT V 170-171) 'more central (*ičgärü* 'inside') than everything else and highest (*üzä* 'above') of all' (elative). In *yäk ičkäklärdä üstünräk yavlak* 'worse than demons and vampires' (DKPAMPb 152) comparison is expressed by the adjective *üstün* itself expanded by *+rAk*. Together with *takï* 'more' we have *antada takï yegräk* 'even better than that' or, adverbially, *ög+in+tä kaŋ+ïn+ta takï yegräk ara kirür* 'he intercedes (*ara kir-*) for them even better than their mother and father'.

Elative content is also expressed by repeating the same adjective as in *yarok+ta yarok* 'brightest', *aglak+ta aglak* (MaitrH XI 6r10-11) 'most

unfrequented', *avïngu+ta avïngu* 'most amusing'[259] or *artok+ta artok süzök* (Maitr 26A r6) 'exceedingly pure'. Compared adjectives need not have *+rAk* either, as in *muntada ymä muŋadïnčïg* 'more wondrous than this' (Maitr 26A r3).

Reduplication is another means of intensification limited to adjectives and adverbs. Here the stem is preceded by a syllable consisting of the first consonant (if it starts with one), followed by the first vowel and *p*: e.g. *kap+kara* 'quite black' (and other colour names), *tüp+tüz* 'quite level' (and other shape adjectives), *ap+arïg* 'quite clean', *äp+äsän* 'quite healthy' or *tup+tutčï* 'quite uninterruptedly'.[260] This is the only productive morphological process which is not suffixal; the reason must have been iconic (in modern languages the additional syllable bears the word stress). More on Old Turkic reduplication can be found in OTWF § 2.23, on *+rAk* in § 2.22.

Superlatives are formed by preposing the particle *äŋ* to adjectives; Uygur examples can be found in the UW; *äŋ* is attested also in runiform and Qarakhanid sources. *ulug+ï* 'the big one among them' and *kičig+i* 'the small one among them' are quite often found in adnominal use with superlative meaning both with and without *äŋ*: *äŋ ulugï tegin* (Suv 608,15-17) is 'the eldest prince', *šankï atlag ulugï oglïnïŋ bašï* (MaitrH XV 13v4) 'the head of his eldest son called Śaṅkha'; *ulugï täŋri* and *kičigi täŋri* (HamTouHou 1a r1 and 8) signify 'the greatest' and 'the smallest god' respectively. *ulugï* does not have to be adjacent to its head: *ulugï mahabale tegin* (Suv 609,23) 'the oldest prince, Mahābala'. In *ol yäklärdä ulugï* (ManUigFrag r5) 'the leader of those demons' the group out of which the entity referred to is the biggest appears in the locative case form; similarly *kamagta äŋ ken(ki)* 'the very last' etc. (UW).

3.113. Deverbal derivation of nominals

This topic will be dealt with rather summarily here; see OTWF part III for details. We distinguish four groups of deverbal nominals by their functions. Firstly, nominals derived from verbs with most formatives denote either the subject when the verb is intransitive and the object when the verb is transitive, or the action; they are called 'ergative' in OTWF because this distribution reminds one of the uses of the nominative in languages which show ergative sentence structure: It marks the subject of intransitive verbs but the object of transitive ones.

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[259] From *avïn-* 'to divert oneself'; see section 3.284 for the *-gU* formation.

[260] DLT fol. 165 says that the Oguz could use /m/ or (in one case) /s/ instead of /p/.

Secondly, nominals formed with *-čUk*, *-gUč* and *-gOk* (for which see OTWF section 3.2) denote instruments. A third group, consisting of positive *-(X)nčIg* (probably < *-(X)nč+sIg*) and negative *-gUlXksXz*, denotes adjectives qualifying potential direct and indirect objects. Examples for *-(X)nčIg* are *akla-nčïg* 'hateful', *amra-nčïg* 'lovely', *kork-ïnčïg* 'frightful', *yüräk yarïl-ïnčïg* 'heart-rending'; using an adjective of this formation, the speaker states that an entity qualified by it is likely to induce in anybody the state of mind described by the verb from which the form is derived. *-gUlXksXz* adjectives (e.g. *adkanguluksuz* 'what one should not adhere to', *titgülüksüz* 'what one is not expected to renounce', *adïrguluksuz* 'something which should not be separated') describe entities as connected with an action which should not be carried out. When used predicatively, adjectives formed in this way state about entities that they are such that actions described by the base verb should not be carried out in connection with them. *-gUlXksXz* differs from *-mAgUlXk* (described in section 3.284) in not reflecting the wish of the speaker/writer but rather his opinion concerning prohibitions. A fourth group of deverbal nominals, dealt with below a bit more extensively, is agentive.[261]

The deverbal derivate group showing ergative behaviour is clearly the largest, both by number of formations (18 opaque ones) and by the number of derivates. The formatives (in descending order of importance) are *-(X)g, -(O)k, -Xš,*[262] *-(X)nč, -(X)nčU, -(X)m, -Xn, -(U)t, -mA, -gI, -(X)z, -gXn* etc.. The common and composite *-(X)glXg* and, in the negative domain, *-(X)nčsXz* form adjectives qualifying nominals which show the same 'ergative' behaviour. The formations mentioned differ in the degree to which they are lexicalised to denote the action or the event itself; with *-(X)g,* e.g., event nominals form the greatest group, while they are very much of a minority with *-(O)k,* another common formation. *-(X)nč* and *-(X)nčU* were distinct formatives and not phonetic or morphophonemic alternants of each other (as has often been assumed), although contaminations and some confusion between them took place already in early times. While *-(X)nč* forms are usually associated with verb stems ending in /n/ and may have their source in the formative *-Xš* being added to these (with [nš] > [nč] as subsequent development), such a connection can hardly be detected with *-(X)nčU*. The formation in *-(X)m* is in the DLT and in a few late Uygur texts used

[261] The formation in *-gAk* does not quite fit into any of these; cf. OTWF §3.327.

[262] This and *-Xn* are dominant formations; see section 2.51 above.

for denoting measurement units of substances; see the end of section 3.14.

-(X)g, which is the most common formative for deverbal nouns (see OTWF § 3.101), was involved in suffix derivations and suffix compounding which sometimes led into inflexion: The DLT (fol. 582) deals with *-(X)glXk* as a 'participle of necessity'. The converb suffix *-gInčA* (see section 3.286) probably comes from *-(X)g+(s)I(n)+čA*, i.e. with the possessive suffix in the equative case. The ergative suffix *-(X)glXg* and agentive *-(X)gčI* (see below) as well as the desiderative suffix *-(X)gsA-* (section 3.212) also contain this element. All this means that *-(X)g* must have been just as common, or even commoner and more productive, in prehistorical times.

Nominals derived with *-(X)gčI, -gUčI*, *-(X)mlXg, -gA, -gAn*, a few minor formatives and *-mAksXz* always refer to or qualify the subject of the verb they are derived from.[263] This is clearly a secondary group: *-(X)gčI, -gUčI*, *-(X)mlXg* and *-mAksXz* are composite; *-gA* and *-gAn* appear to have been taken over from inflexional morphology (and probably not the other way around): *-gA* may have been related to *-gAy*[264] while *-gAn* is the Common Turkic participle suffix. Deverbal nominals may originally all have been of the ergative type. In the negative domain there is a three-way division of tasks between composite forms: *-mAksXz* denotes only subjects, *-gUlXksXz* all other participants but never the subject and *-(X)nčsXz* the subject if the verb is intransitive but the object if it is transitive.

The *-(X)gčI* form sometimes has verbal government; here are two instances with the dative: *üč ärdnikä tapïgčï tïnlïglar az; yäkkä ičgäkkä kamka tapïgčï tïnlïglar üküš täŋrim* (TT VI 017-018) 'Creatures worshipping the three jewels are few; creatures worshipping demons, vampires and magicians are numerous, my lord'; *burxanlarïg nom tilgänin ävirtgükä, altï p(a)ramïtlarïg tošgurtguka ötügči bolsar, ..., nom tözin ača yada ukïtguka ötügči bolsar* (Suv 181,16-22) 'if he becomes one who prays for the buddhas to turn the wheel of *dharma* and to fulfill the six *pāramitās*, … who prays for (staying on earth for innumerable ages and) explaining and dissipating the esssence of the law …'.

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[263] In the Suv the form *-gUčI* is used also for qualifying objects; see section 3.282.

[264] The relationship between *-gA* and *-gAy* is discussed in section 3.234 below. The deverbal suffix *-gAysOk* / *-gAsOk* (OTWF section 2.93) must also have been formed from such nominal *-gAy* / *-gA* through the denominal suffix *+sOk* (dealt with in that same section of OTWF).

Derivates formed with other compound deverbal suffixes containing *+čI* can also govern objects: *-(U)t+čI*, e.g., in *ay ölütči* in TT VI 92, where the moon is governed by *ölür-*, the base of *ölütči*.[265] Another deverbal form capable of verbal government is *-(X)m+čI*, in *isig öz alïmčïlar* (several times in Suv) and perhaps another phrase quoted in OTWF 117.[266] It is certainly no coincidence that all the deverbal nouns quoted as governing objects are composed of *+čI* as final element, *+čI* being an agentive formative even though it is denominal.[267] Note, however, that it was not impossible, in principle, for other formatives to show such government: Kāšġarī creates the sentence *ol ävin bäzä-t-igsä-k* which he translates verbally as 'He longs for his house to get painted' the form in question is an *-(O)k* derivate of a desiderative in *-(X)gsA-* from a causative verb.

The functions of *-(X)glXg*, the most active among the ergative suffixes, are documented and discussed in OTWF section 3.119. *közi yüm-üglüg olorur ärti* 'He used to sit with closed eyes' (Ht VI 2b9) is similar to *özi atanmïš, ögrünčülüg, atï yet-iglig kälir* (IrqB LV) 'He comes a famous and joyful man, his horse being led (for him)' in that both forms are predicative and accompanied by their objects (*köz* 'eye' and *at* 'horse' respectively). More often, such expressions are adnominal, as *yügrük atlarïn koš-uglug kaŋlï* (Suv 625,5) 'a chariot harnessed to swift horses'.

Among the *-(X)mlXg* nominals, *tägimlig* 'worthy of …' also governs the dative (examples in OTWF 374); it does so more like a postposition than like a verb, however, as it is no longer transparent. The fact that it can govern gerunds in *-gAlI* (e.g. in AbiIst 58 or MaitrH X 4v9) does not really make much of a difference here. Other *-(X)mlXg* adjectives like *ärtimlig* 'transient', *kanïmlïg* 'satisfied, content' and *särimlig küdümlüg* 'patient' have no verbal government. *-gA* lexemes are also

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[265] OTWF 116 quotes passages in which *küzätči* 'guarding, guardian' governs direct objects such as *yertinčü* 'the world' or *ordo kapag* 'palace and gate'. In *darnï arviš tutdačïlarïg kögči küzätčilär üčün* (Warnke 166) 'because they guard and defend people who uphold spells' an *-(X)g+čI* derivate of *kö-* and an *-(U)t+čI* derivate of *küzäd-* have the government of an accusative form in common.

[266] Such phrases can, of course, also be understood as complex nominal phrases if the first element is in the stem form and not in the accusative; in section 4.121 below we discuss also nominal phrases whose head has no possessive suffix although the internal relationship is neither appositional nor adjectival, as in *balïk kapag* 'city gate' or *beš ažun tïnlïglar* 'the beings of the five existences'. Instances as these *may*, however, be set phrases, the heads of the type discussed in the present section do seem to be transparently deverbal and in a few cases the object *is* in the accusative case.

[267] Denominal *+čI* forms do not, of course, govern objects.

often transparent (e.g. *bilgä* 'wise person') but none show any signs of participle-like behaviour either.

Another adjective formed from a deverbal nominal (the 'dominant' *-Xš*) with the help of *+lXg* is *küsüšlüg* 'desirous (of)' from *küsä-* 'to wish' over *küsüš* 'wish'. OTWF 273 quotes examples of *küsüšlüg* governing the objects *nom* '*dharma*', *munta kutrulmak* 'to save oneself from this', *burxan kutï* 'buddhahood' and *[b]o kutlug kün+üg* 'this blessed day (accusative)'. In *bir kün ičintä mïŋ tümän kata körgäli küsüšlüg kulï alp kara* (HamTouHou 5,64) 'his slave Alp Kara, who wishes to see him ten million times a day' *küsüšlüg* governs a converb form in *-gAlI* and in fact functions as an attributive participle of *küsä-*. Since this lexeme shows some verbal characteristics, one would want to derive it directly from *küsä-* through a composite deverbal formative; other instances of *-Xš* with *+lXg* do not, however, show any degree of fusion. Above we quoted an *-(X)mlXg* form governing a converb in *-gAlI*. Derivates in *-(X)nč* can also govern such converbs, as *sakïnč* < *sakïn-* 'to think' in *kim kayu är kunčuylarka yarangalï sakïnčïn yïrlap taxšurup bitig bititsär, ...* (U III 75,10) 'Whichever man sings and writes verses and has letters written with the intention of currying favour with women, ...'. *kunčuylarka yarangalï sakïnč* is the nominalisation of the phrase *kunčuylarka yarangalï sakïn-* 'to plan to curry favour'. With *kertgünč* < *kertgün-* 'to believe' we have *üč ärdnikä kertgünč köŋüllüg upasi* (MaitrH Y 4) 'the lay brother with faith in the three jewels'. All this shows the fuzziness of the border between lexeme formation and grammar.

-gAn is a participle and action noun suffix in most of the modern Turkic languages and is likely to have been a part of the inflexional system already in Proto-Turkic. In Old Turkic this use is either archaic, however, or else we find it in late texts, where it may have been reintroduced from other dialects; such use is mentioned in section 3.282 below. Petrified *-gAn* forms are *tikän*, *yargan* or *bazgan*, all discussed in OTWF section 3.324. Some instances of *-gAn* do belong into word formation, however, as they are clearly neither participles nor petrified lexemes. Such instances (dealt with in detail in OTWF section 3.324) are *esnägän bars* (IrqB X) 'a yawning tiger (not one yawning during the event recounted in the passage)', *udïgan* (MaitrH III 3r6) '(a snake) prone to sleep', *tutgan* and *kapgan* (HamTouHou 17,4-9 and 1´-6´) '(a) rapacious (falcon)', *savï yarlïgï yorïgan* (Schwitz 17) '(somebody) whose words and commands generally prevail', *kišini tutagan*[268] (TT

[268] See OTWF 425 for the first vowel of this verb, mentioned in the EDPT as *'tota-'*.

VII 25,6) '(habitually) disparaging (people)' and the forms *ugan, törütgän, igidgän, käčürgän* and *yaratgan* which are all epithets for God Eternal in the QB. Such *-gAn* forms clearly denote the habitual subject, a living being characterised by the activity denoted by the base. The explanation for the agentivity of this suffix and for the fact that it governs objects is probably its likely morphological origin; one could even make a case for the view that some late Old Turkic sources use it as a participle.[269]

Deverbal nouns are distinguished from the whole verbal system by being negated with *+sXz* or analytically, whereas the former have *-mA-* preceding the mood, tense-aspect, participle or converb suffixes.

3.12. Nominal inflexional morphology

This is of three types. There is, first, the inflexion of nouns and adjectives, the latter also getting used adverbially. Pronominal and numeral morphology, which differ from this first type, are discussed in sections 3.13 and 3.14 below. The inflexional morphology of nouns and adjectives consists of the markers of four categories, number, possession, antonym marker and case.[270] Further, of a converter *+kI* (applied to local and temporal terms of miscellaneous shape; section 3.126) and, for Uygur, of *+lXg* (section 3.111 and 4.122) which, like the genitive suffix, has some converter qualities. As a further (non-inflexional) nominal category we should mention (in)definiteness, since an Old Turkic nominal can be accompanied by the indefinite article *bir* (distinct from the numeral 'one' by meaning and distribution), mentioned in section 4.1.

Rather then modifying nominals, the categorial markers discussed here in fact modify noun phrases: In *közi kara+m* 'my black eyed one' (M II 9,19), for instance, the possessive suffix is even added to two words in predicative relationship, not having become one lexicalised

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[269] *yügürgäntä bultumuz* in HamTouHou 20,11 should be translated as the editor does: *yügürgän* 'courier' is documented in the DLT. This is a lexeme and not a *-gAn* form created *ad hoc*, which it was taken to be in OTWF 384.

[270] *+(X)m* appears to have become a feminine marker in some words; see the end of section 3.122. The gender of terms formed with the Sogdian feminine suffix *+anč*, e.g. *arxantanč* (examples in the UW entry) 'female *arhat* (saint in Indian tradition)', *n(i)gošak n(i)gošakančlarka* (M III nr.27 r6) 'to male and female auditors', *koštiranč* 'female presbyter', *šarmiranč* 'female novice' or *šamnanč* 'nun' was clearly transparent to Uygur readers. The existence of a category of human gender could have been considered even though the suffix is attested only with borrowings, if there had been more examples or if they had shown greater semantic diversity.

whole. There is, further, the group inflexion phenomenon, which concerns only nominal, not verbal affixes (but does concern the suffix *+lAr* also when applied to finite verb forms, as shown in section 3.23 below). In *tsuy irinčülärimin* (TT IV B 50) 'my sins (acc.)', e.g., the plural, possessive and case suffixes are added to the two synonyms (the first copied from Chinese) together. In *bulganmïš tälgänmišin ukup* 'noting that they are in confusion and disorder' (*AoF* 20(1993): 374 r11), e.g., the nominal ending expressing both 3rd person reference and accusative case is shared by the two *-mIš* forms; it agrees, of course, with the last one in synharmonism. The first word could also have had the shape **bulganmïšïn*, but the procedure chosen by the author or translator adds cohesion between the two verbal nominals.

The morphemes expressing the four nominal categories (plus indefiniteness as non-morphological category, mentioned on the previous page) are added to their base in the order they are cited above.[271] Number may originally have been a bit akin to derivation, in that different word classes had different plural forms. The suffixes of case, on the other hand, appear as last element in the morphological chain (unless followed by *+kI* to incorporate the whole morphological structure into a new nominal base). This fact is connected with their similarity, in some ways, to postpositions (with which they also share syntactic tasks). In Uygur the plural suffix can, however, appear after the possessive suffix to denote a plurality of possessors, e.g. in *yetinč ugušuŋuzlarnï birlä* (U III 55,11) 'together with your seventh generation' (i.e. including the seventh generation after you). The sentence is addressed to a number of persons; this is not made clear enough by the plural possessive suffix, which is used for polite address to singular addressees. For the same reason, *+lAr* is added also to the plural imperative. Adding *+lAr* to *uguš* would not, in Uygur, have expressed that the plurality is meant to apply to the possessors and not to the possessed.

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[271] '*yer+i+lär+dä'* with the possessive suffix preceding the plural suffix instead of following it has been read in *'üzütüm(ü)n siz kurtganïŋ tünärig yerilärdä ozguruŋ'* (M III nr.9 II,I v5-7), translated as "meine Seele aus den finstern Ländern der greisen Todesdämonin errette Du!; this is also quoted in Zieme 1969: 114. The third word should, however, probably be read as *kurtgarïŋ*; in the writing style which Le Coq here qualifies as "nachlässige uigurische Pinselschrift", N and R are often similar. P. Zieme (personal communication) now reads the word discussed here as *yagïlarda* and not *'yerilärdä'*. This gives two sentences with parallel verbs: 'Redeem you my soul and save (me) from murky enemies'.

3.121. Number

This is a binary category, with 'plural' as marked member: Plural entities are commonly marked with *+lAr* but the absence of this element does not signify that the reference is to a singular entity.

In the runiform inscriptions, nominal plurality was expressed only with humans, and that only occasionally; the following sentence, e.g., clearly refers to all the sons and daughters of the nation: *bäglik urï ogluŋ kul boltï, esilik kïz ogluŋ küŋ boltï* (KT E 34) 'Your sons, meant to be lords, became slaves, your daughters, meant to be ladies, became concubines'. As pointed out in Tekin 2003: 101, the inscriptions apply *+lAr* to the social class of *bäg+lär* 'the lords' and to names for family members. According to Johanson 2001: 1728a "ist im Ost-Alttürkischen *-lAr* noch ein Kollektivsuffix"; this can hardly be the case when Köl Tegin (N9) refers to his own sisters and wives as *äkä+lär+im* and *kunčuy+lar+ïm* respectively. In the Yenisey inscriptions we also find *kälin+lär+im* 'my daughters-in-law', *küdägü+lär+im* 'my sons-in-law' or *kadaš+lar+ïŋïz* 'your relatives'.

In the Orkhon and Imperial Uygur inscriptions, the Common Turkic *+lAr* competes with the suffixes *+(U)t, +(A)n* and *+s. +(U)t* (which may have been borrowed together with the bases it is used with) appears e.g. in *tarkat, säŋüt* and *tegit,* the plurals of the titles *tarkan, säŋün* and *tegin*. See OTWF 78-79 for documentation and subsequent retention.[272] In (post-inscriptional) Uygur, the 'normal' plural suffix *+lAr* was added unto these forms, giving the common *tegitlär* 'princes' or (in MaitrH XVI 11r25) *bägitlär* 'the lords'. *otuz tegit oglanï … birlä* (MaitrH, colophon,24) 'together with his 30 prince(ly) sons' still has the simple form. *+s* appears only in a term borrowed from Sanskrit, *išvara+s* (ŠU S 2), 'potentates'. *+s* looks Indo-European while both Mongolic and Sogdian have plural suffixes with *°t*.[273] *+(A)n*, the third rare plural suffix, is discussed in OTWF 91-92. It appears in *är+än* 'men', *tor+an* 'system of nets', *öz+än* 'the innermost', **bodu+n* 'nation' and *og(u)l+an* 'sons', e.g. in IrqB LXV: *amtï, amrak og(u)lanïm, anča biliŋlär* 'now, my dear sons, know you thus'; the plural verb form shows that more than one

[272] The suffix was mentioned as *+(X)t* in the OTWF but none of the instances attested with common nouns gives unequivocal proof for the identity of the vowel. The Taŋut people (this name first mentioned twice in the Orkhon inscriptions) were in Tang China called Dang Xiang. I would propose that *+Ut* was added to this first syllable. If this was done by Turks, the vowel would be fixed as /U/. If the language was Mongolic (the plural suffix *+Ud* being fully productive there), Mongolic /U/ would correspond to Turkic /X/.

[273] The suffix is most likely to have been of Mongolic origin as only that language group had *+n* vs. *+t* as a regular representative of singular vs. plural in nominals.

person was being addressed. Note also *ogulanïm inilärim* 'my sons and younger brothers (M III 9,5) with parallelism between the two suffixes.

The appearance of *+lAr* was in general not a matter of economy but of individuality, the height on the agentivity scale of the entity involved and, no less important, relevance: Take the passage *az ïnaru barm[ïš], bir ögü[r] muygak kör[miš], ymä muygak sïgunug uvu[tsuz bi]lig üčün edärür ärmiš. bo bälgü körüp ymä ...* (M I 35,7) 'He went a bit further and saw a herd[274] of female maral deer. A female maral deer was pursuing a male maral deer for sex. He saw this sign and ...'. The reference could also be to a number of females pursuing the males; we don't know, as the author does not appear to have attached any importance to specifying the number. In the simile *kaltï balak* (= *balïk*) *suv ičrä yüzärčä* (M I 17,14) *balïk* 'fish' could be either singular or plural; the translation could either be 'as a fish swims in water' or 'as fish swim in water': The difference just does not matter in this particular context. Uygur and Qarakhanid sources have the common Turkic marker *+lAr* appearing with any entities and not just with humans, e.g. *üdlär* 'periods of time', *täŋri mäŋiläri* 'divine pleasures', *yultuzlar* 'stars'. Even there, however, the presence of *+lAr* is indicative of a plurality of individual entities rather than a mass (unless an Uygur translator is translating a foreign source literally).

Forms without *+lAr* could sometimes be understood as plural when no number words were around even in the wider context: *495 bodisavtlar kuvragï* 'the assembly of the 495 bodhisattvas' but *adïn täŋri kuvragï* (in the context) 'the assembly of the other gods'.

The honorific use of plural forms is normally limited to the pronominal and the verbal domain. Rarely, a nominal plural form can also serve this purpose: The question *tözünlär, bo körünč körüp köŋülüŋ yazïlt[ï] mu* which Upatiṣya is asked by Kolita (ms. Mz 708 r 29-30 quoted by Zieme in *UAJb* 16: 295) signifies 'Oh noble one! Did your heart stray seeing this pageant?'. Similary in KP 45,3, where *bodis(a)vtlar* is used in clear honorific reference to a single person (alternating with *bodis(a)vt* two lines further on); here the person is not addressed but spoken about.

In ApokrSū 262, 265, 268, 271, 272, 283 and 286 we have *kunčuy+lar* 'ladies' referring to a single woman, as completely clear from the context. The note to the passage mentions Mongolic *exe+ner* denoting a (single) woman, refers to a paper by Doerfer on the category of number in Manchu and writes that it is "wahrscheinlich als ein

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[274] The editor writes *bir ökü[š]* (i.e. *üküš*) but *ögür* seems more likely to me. If there is enough space in the lacuna, the text may have had *bir ögü[r sïgun] muygak*.

Pluralis modestiae zu betrachten"; the process concerning this Arabistic term may rather have involved tabuisation, which made it improper to refer to a person's wife directly. Deference is, at any rate, certain not to be involved in the ApokrSū passage.[275]

Collectives are also related to plurality. Nouns and numerals formed collectives with the suffix *+(A)gU* (discussed in OTWF section 2.52); a common example is *adïn+agu* 'other(s)', attested e.g. in M III nr. 8 V v 5 and VI r 1. In Orkhon Turkic, this form has an additional /n/ (no doubt akin to the 'pronominal' *n*; cf. next section) when further suffixes are added: We have *käliŋünüm* (**kälin+(ä)gün+üm*) 'my daughters-in-law' in KT N 9, *tay+agun+uŋuz* 'your colts' (KT SE)[276] and *iniy+ägün+üm*[277] 'my younger brothers' (KT S1 and N11, BQ N1).

3.122. Possession

Here are the 'possessive' suffixes, which come second in the morpheme chain:

	singular	plural
1st person	+(X)m	+(X)mXz
2nd person	+(X)ŋ ~ +(X)g	+(X)ŋXz ~ +(X)gXz, +(X)ŋXzlAr
3rd person	+(s)I(n+)	+(s)I(n+), +lArI(n+)

The common *t(ä)ŋri+m* is an example for the 1st person singular possessive suffix losing its onset vowel with a stem ending in a vowel. These suffixes share the plural element *+(X)z* with the personal pronouns *biz* and *siz*, and the 1st person possessive suffixes have a labial

[275] The Arabic plural *'iyāl* 'family members', which in many Turkic languages came to signify 'wife', may or may not be another example for the same phenomenon: Many Arabic plurals of other semantic domains, e.g. *tujjār* 'merchants', also acquired singular meanings in Turkish.

[276] These two forms cannot be connected with Mongolian *gü'ün* (Written Mongolian *kümün*), as T.Tekin (1968: 121) thinks, as that is not a suffix but a noun and signifies 'person, people'; *+(A)gU* is by no means limited to humans or even to living beings.

[277] *iniy* is the archaic form of *ini* 'younger brother' which still appears as *inī* in Yakut. It was thought by some that *iniyägün* is a compound of *ini* with 'nephew'; this latter, however, is *yegän* and not *'yägün'*. A passage in E28,8, a Yenisey grave inscription, has been read as *tört (i)n(i)l(i)gü (ä)rt(i)m(i)z; b(i)zni (ä)rkl(i)g (a)d(ï)rtï,* by T. Tekin 1991: 357 translated as 'We were four brothers; the god of the Underworld separated us'. This does not suit the meaning of the comitative suffix *+lXgU*: That would have had to be translated as 'we were with four brothers', which does not suit the context. I take l^2 in the first word to be a scribe's error for y^2: *iniy+ägü* would fit this context (and Tekin's translation) perfectly. The stone does show l^2 but the two letters are quite similar; he could have misread his handwritten source.

as in *bän*. Labials in the 1st person are a universal feature, however, and do not signal any etymological connection. An etymological connection between the 2nd person possessive suffixes and the 2nd person personal pronouns – postulated by some scholars – is also quite unlikely: The former have a nasal or Weak oral velar whereas the latter ends in an alveolar nasal in the singular and has no nasal at all in the plural; nor is the onset /s/ of *sän* likely to have melted away in any accountable variety of Proto-Turkic. In short, personal pronouns and possessive suffixes can *not* be connected.

In the 2nd person the nasal and the voiced velar fluctuate in the Orkhon inscriptions, without apparent reason and even in the same phrase; e.g. *el+iŋ+in törö+g+ün* (KT IE22) 'your land and your government (acc.)'. Other examples for /g/ are *buŋ+ug* (KT S8) 'your worry', *ädgü+g* (KT E24, BQ E20) 'your profit'. The /g/ appears also in verbal forms, where it refers to the subject: *bilmä-dök+üg+ün üčün* (BQ E20) 'because of your ignorance' (accusative form governed by the postposition), *öl-sük+üg* (KT S7, BQ N5) vs. *öl-sük+üŋ* (KT S6, BQ N5). With the preterite the oral velar is attested both in the singular and in the plural: The forms *alkïntïg, arïltïg, bardïg, ärtig, kïltïg, kigürtüg, körtüg, öltüg* and *bardïgïz* are all quoted in Tekin 1968:92-93. This fluctuation is found in some modern languages as well, e.g. among the Anatolian dialects.

In some Manichæan mss., e.g. one ms. of Xw, we find that the 1st person plural possessive suffix has the form *+(U)mXz* / *+(U)mUz* e.g. *tak+umuz* (251) instead of *takïmïz* and, with the preterite form which has the same suffixes, *sï-dumuz* (256) and *bačama-dumuz* (258).

We have a rare repetition of the possessive suffix in the common *bir+i+si* 'one of them'; this may possibly have come about through analogy from *iki+si* 'both of them', in case *iki* / *äki* was felt to come (or really was) from **äk+i* 'its supplement'.

In the 3rd person singular and plural, the suffixes in the table are written with an *n+* at their end; this *n+* appears in brackets because it is absent in the nominative (where the 1st and 2nd person possessive suffixes serve as they are). Cf. the demonstrative pronouns, which show the same element; the personal pronouns have a related phenomenon especially in the plural domain, and cf. Orkhon Turkic *+(A)gU(n)*. In earlier texts, the *n+* of the 3rd person possessive suffixes in fact appears before all suffixes: also the antonymy and parallelism marker *+lI* (see section 3.123) and the suffix *+lXg* (e.g. in *burxan kutïn+lïg* 'related to

Buddhahood'). independent pronouns.[278] The pronominal *+n+* of this suffix, lost in South Eastern Turkic from the Middle Turkic period on, gets dropped already in the dialect of the fragments in Sogdian script (*san+ï+ča*, *kut+ï+ga*). Note, further, that *+I(n)+* and *+sI(n)+* do not function in complementary distribution in Chuvash, but that rather the cognate of *+I(n)+* contracts with any stem coda vowel. What clearly is the Chuvash cognate of *+sI(n)+* gets used in cases of inalienable possession,[279] suggesting some such original set of functions also for Proto-Turkic. A single instance of the absence of /s/ after vowel in a relatively late text (*süü+iŋä čärigiŋä* in Suv 409,11, St. Petersburg ms.) might be considered an error (or was possibly meant to be read as *süwiŋä*) and not an archaism (thus also Zieme 1969: 67 against Ramstedt). *+sI(n)+* is normally spelled with front n^2 and s^2 in Orkhon Turkic also when appended to back-vowel words. This suggests that it may not have been synharmonic,[280] which, in turn, accords with the theory that it originally was an independent pronoun. The Chuvash 3rd person possessive suffix also always consists of a front vowel, which has by Benzing 1940: 251n. been linked to the Orkhon Turkic facts. It may, however, also be that the Chuvash situation is secondary, as Common Turkic *+kI* became *+ki* in Turkish, and the Orkhon Turkic fronting appears to be subphonemic: The form *suv+iŋaru* (in BQ E40 in a binome together with *yer+iŋärü*, 'towards their country') with the directive ending following the suffix is spelled with r^1 and *w* (not *ẅ*).[281] We even find *tözünlär+in+lugun* (spelled with X in the case suffix) in an early Manichæan text, DreiPrinz 119. See section 3.132 for forms of the pronoun **ï(n+)*.

In the 1st and 2nd persons of the possessive paradigm, plurality is marked by an element *+(X)z*, as in the personal pronouns referring to these persons.[282] There are numerous examples in which 2nd person

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[278] The 3rd person possessive suffix may possibly originally have been identical with the obsolete pronoun *ïn+* discussed in section 3.132 below.

[279] This is what appears from examples quoted in Benzing 1940: 253, 255 and in other publications.

[280] This was first proposed by Radloff, later by Räsänen; see Tekin 1968: 18 for references.

[281] Orkhon Turkic *orto+sïŋaru* is also spelled four times with r^1 and w, but Hesche 2001 makes a case for the view that these are instances of *kün orto* 'south' and *tün orto* 'north' governed by a postposition *sïŋaru.* There are no other relevant case suffixes: The dative has no oral velar but /ŋ/, for which there is only one sign in the Orkhon inscriptions. The ligature with which the locative is always spelled and the *č* of the equative are also used both in front and back contexts.

[282] Bang, Gabain (e.g. 1974 § 71) and others took this to be an old dual suffix, stating

plural possessive endings serve polite reference to single entities, e.g. *ymä anvam yutzuŋuz bolzun* (M III nr. 7 I v 5) 'Moreover, may Anvam become your (sg.) wife'. Such plurality of politeness is not always consistent; examples like the following are not rare: *s(ä)niŋ ïdlïg yïparlïg yemišlikiŋizkä kigürüŋ* (M III nr. 9 II v 10-12) 'Introduce me into your fragrant orchard'.

'Possessive' suffixes normally express either possession or general appurtenance and assignment. In these functions, their meaning is practically identical to that of the personal or demonstrative pronouns in the genitive; see section 4.121 for examples.

Added to adjectives, the 3rd person possessive suffix can refer to the bearer of the quality in question. With verbal nominals the possessive morpheme refers to the subject of the verb, e.g. in *y(a)rlïkamïš+ï üčün* 'because he graciously (dived)' (M III nr. 15 r 2; WilkManKat nr. 352). Thus also e.g. in *k(a)mug s(ä)vüglärim - ä* 'Oh all my beloved ones!' (ms. U 140 v3 quoted in Zieme 1969: 98), where the 1st person possessive suffix refers to the loving person. This is also what we have with perfect or projection participles such as the ones ending in *-dOk* and *-sXk* respectively, as described in sections 3.283 and 3.284, and in fact in the paradigm of the constative preterite (section 3.232 below), which has been said to consist of a participle suffix involving an alveolar consonant plus the 'possessive' suffixes.

In *üküš+i* 'many of them' (e.g. in BT II 238) there is a partitive relationship. Such expressions are used adnominally as well, e.g. in *amarïlarï tïnlïglar* (TT X 39) 'some of the creatures'. Similarly with the possessive suffix of *ulug+ï* in e.g. *äŋ ulugï tegin iki inilärinä ïnča tep tedi* (Suv 608, 15-17) 'the eldest prince said to his two younger brothers': It refers to the group of the three brothers. This is the phenomenon Grønbech 1936: 92ff. mostly had in mind when calling the 3rd person possessive suffix an article. Three examples, with *ulugï,*

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that words as *köz* 'eye', *köküz* 'breast', *tiz* 'knee' or *müyüz* (**buñuz*) 'horn', representing body parts of which men or animals have a pair, are formed with it. *agïz* 'mouth' was assigned to this group because there are two jaws. *+(X)z* was taken to appear also in *biz* 'we' and *siz* 'you (pl.)', in *ikiz* 'twin' and in the 1st and 2nd person plural possessive suffixes. However, a number of body parts which come in pairs, such as *älig* 'hand', *kulkak* 'ear', *ägin* 'shoulder' or *adak* 'foot', do not end in /z/; *mäŋiz* 'complexion' ends in /z/ but is not a pair and does not consist of two parts. *köz* is probably derived from *kör-* 'to see'. In (Qarakhanid etc.) *ikiz* 'twin' duality is denoted by the base and not the suffix. It seems unlikely that Proto-Turkic should have had a dual, as there is none in any Turkic language or in Mongolian. Róna-Tas 1998: 73 writes: "Contrary to the opinion of Erdal and others *-z* has never been a dual suffix or denoted pairs of body parts"; I never expressed a view different from the one formulated above.

äŋ ulugï and *äŋ'ilki ulugï* respectively, are quoted in Gabain 1974: 158 (§ 360) and 398 (suppl. 56). The 3rd person possessive suffix creates contrast within a group, e.g. *ulugï täŋri ïnča tep tedi* and *kičigi täŋri ïnča tep tedi* 'The greater one among the gods said the following' and 'The smaller one among the gods said the following' in the Araṇemi-Jātaka (HamTouHou 1, 1 and 8). Cf. further *sïŋar+ï bodun ičikdi, sïŋar+ï bodun kirti* 'Half / Part of the people submitted, the other half / part retreated' (ŠU E6-7), with the possessive suffix referring to the 'whole'. The expression *anta kalmïš+ï bodun* 'that part of the people which stayed behind' is from the same inscription (N3); note that the contrastive possessive suffix is here added to a participle representing the head as subject.

The possesive suffix also has referential tasks within text structure: Take the sentence *Amga korugun kïšlap yazïŋa oguzgaru sü tašïkdïmïz* (KT N 8), which signifies 'We spent the winter at the Goat reserve and, *that* summer, drew out with our army against the Oguz'. The possessive suffix in **yaz+ïn+ga* refers back to the winter preceding the summer of the Oguz raid. The use of the possessive suffix in *keniŋä* 'in the end' (Pfahl I 8) referring the the preceding narrative is similar. In *yol+ï*, which forms adverbial multiplicatives (section 3.14), finally, such reference has become rather fuzzy.

Old Turkic (like e.g. Modern Turkish) shows switch reference, where a preceding and a following element refer to each other by possessive suffixes; e.g. *titsi+si baxšï+sïŋa* (TT X 18) 'the pupil (spoke) to his teacher', *ata+sï ogl+ï tapa kälmiš täg* (TT X 71) 'as when a father comes to his son': English uses possessive marking only for the entities mentioned second, thus refering only backwards and not forwards.

täŋrim, literally 'my god', is a deferential way of address, like *my lord*, French *ma-dame*, Arabic *sayyid+i* (> *sīdi*) etc.

The 3rd person singular possessive suffix is often used for the plural as well, e.g. inscriptional *üč küräg kiši*[283] *kälti, sav+ï bir* 'There came three enemy deserters all submitting the same report'; *süsin anta sančdïm, ävi on kün öŋrä ürküp barmïš* 'There I routed their (the Karluk's) army; their households had, it turned out, gotten alarmed and fled ten days earlier'. This was no doubt the Proto-Turkic situation, still found e.g. in Chuvash. In Uygur we find e.g. *kaŋï xan ögi katun* ...

[283] This word is based on an emendation by Radlov accepted by most scholars. The stone has something which apparently looks most like y^2Iy^2I, by Aalto in his edition translated as "nacheinander". This idea, taken up by Alyılmaz 2000: 107 with "art arda", is impossible: Alyılmaz links the reading with *yigi* 'close, compact, dense', but /g/ is never dropped in (early) Old Turkic. We are left with Radlov's proposal, then.

ogl+ïŋa näčä aytsar ... 'in whatever way his father the king and his mother the queen asked *their* son ...'; *tört maxarač täŋrilär ... oŋtun tizin söküp ... ayasïn kavšurup* ... 'the four *mahārāja* gods knelt on *their* right knees and joined *their* palms (*aya+sïn*)': The praying gesture obviously involves the palms of a person's both hands. Also in an instance with *+lAr* like *yigi kïlïnčlarïn* in Pothi 20, which should be translated as 'their close-set deeds (acc.)', there is no need to think that *+lAr* actually denotes the plurality of subjects (which must be clear from the context) beside denoting the plurality of actions. The 3rd person plural possessive suffix *+lArI* does not ever appear to get added to the plural suffix *+lAr*; the instance in BT II 744 (*yarlïkančučï köŋüllüg küčlärläri* 'their faculties of commiseration') is isolated and should be an error. What we do have is the addition of *+lAr* after the 2nd person plural possessive suffix, presumably to make clear that a plurality of possessors (and not mere polite address or a plurality of possessed entities) is meant; *+(X)ŋ(X)zlAr* is a composite plural possessive marker: *üskünüzlärtä* (Pothi 366) 'in your (pl.) presence', *äviŋizlärkä tägiŋlär* (Pothi 382) 'reach (pl.) your (pl.) homes!'; *[ögr]ünčün m(ä)ŋin ärmäkäŋ(i)zl[är] bolzun* (M III nr. 27 r 14) 'May a life in joy and happiness materialize for you!'; *sizlärniŋ ogl+an+ïŋïz+lar+nï* (DKPAMPb 172) 'your (pl., polite) children (accusative)'. The Suv, a Buddhist text, has quite a number of instances of this suffix sequence, among them *birök el xan bäg iši bodun kara nomča töröčä yorïsarlar, ötrö sizlärniŋ t(ä)ŋridäm čoguŋuzlar yalïnïŋïzlar teriniŋizlär kuvragïŋïzlar asïlur üstälür* (Suv 194,16) 'If, however, king, lord and lady and the simple folk were to live by manners and tradition, then your (pl.) divine glory and community would thrive' and *köŋülüŋüzlärtä antag sakïnčïŋïzlar tursar* (Suv 2,14) 'if such thoughts come up in your (pl.) hearts'. *kïlïnčlarïŋïz* 'your (pl.) deeds' in Suv 660,1, on the other hand, refers to the deeds of a single person addressed to as *täŋrim* 'my lord', as *kollarïŋïz* 'your (pl.) arms' in Suv 349,3 refers to the two arms of somebody addressed as *kopda kötrülmiš t(ä)ŋrim* 'my elated lord'. Similarly the sentence *alku tetse[lïg] terin kuvraglarïŋïznï yana nomlug yagmurïn barčanï tošgurur tükätür siz* 'You fulfill and perfect all, all your (pl.) communities of pupils, by the rain of *dharma*' (Suv 334,10) is addressed to a single *täŋrim*, who had 'all' communities listening to him.

There is no evident way for a plurality of speakers to refer each to his own 'possessed' entity; we have the problem in Uygur colophons of manuscripts, where the religious merit of having sponsored the copying is by the sponsors deflected to their relatives. When such copying is

sponsored by more than one person, the formulation of the colophon is in the 1st person plural, but in the further text the reference to relatives of each one of the co-sponsors has to be in the singular. Thus e.g. the first text of DvaKol, which has the subjects of the deflexion speaking in the plural (with *tägindimiz* 'we have ventured to ...'), but then has reference to their respective mothers as *anam üsdäk täŋrim, anam ana katun täŋrim, anam arïg kunčuy täŋrim, anam taz küŋ täŋrim* and *anam buyančog täŋrim*, each time with *ana+m* 'my mother' and then their proper name and the honorific *täŋri+m*. In another colophon of collective sponsorship (ms. TM 36 quoted by Zieme in his discussion of *kisi* in *TDAYB* 1987: 306), reference to *kisilärim* 'my wives' is not to be understood as evidence for polygamy but as each sponsor referring to his own wife.

In the example quoted, *täŋrim* marks real female persons, but it appears, in late texts, also to have referred specifically to godesses as such: There is a minimal pair *täŋri* 'god' vs. *täŋrim* 'goddess' in SUK WP 2,18: *tanuk tört maxarač täŋrilär, tanuk yeti äkä baltïz täŋrimlär, yügärüki tanuk ekiči, tanuk är toŋa* 'Witnesses (for this contract) are the four *mahārāja* gods, witnesses the seven sister goddesses, visible witnesses Ekiči and Är Toŋa'. In this function, *+(X)m* precedes the plural suffix and does not follow it. The titles Turkish *han+ïm* and Central Asian *bäg+üm* are also specifically feminine. Note that *äkä* is 'elder sister' while *äkäm* is honorific (e.g. in SUK Sa12,27). *xanïm* appears to be attested already in a late Uygur graffito (PetInscr), where it follows the lady's proper name.

Possessive suffixes can be followed by the antonym marker or, more commonly, directly by the case suffix.

3.123. Antonymy and parallelism

After the slot for a possessive suffix but before case suffixes there was a slot for *+lI,* which marks antonyms or synonyms, elements presented as opposed or parallel in the particular context. Entities without some such connection are rare (a possible example for this is *süli ašlï kertgünčli üčägü* 'army, provisions and faith' in TT V B 105). *+lI* nominals are mostly pairs but sometimes triplets; the latter are then followed by *üč+ägü* (the collective derivate from 'three'), the former sometimes by *iki+gü* (as generally done with lists in Mongolic and late Uygur). Each word receives *+lI* but they share the case ending: *inili äčili* (KT E 6) 'younger and elder brothers', *torok bukalï sämiz bukalï* (Tuñ 5) 'lean bulls and fat bulls' (plurality follows from the context); *tärsli oŋlï kïltačï* 'he who does wrong or right' and the accusatives *igidli kertüli+g*

... *körüp* 'perceiving lie and truth' and *öŋli köŋülli+g* 'appearance and essence' are direct objects. Cf. further *täŋrili yerli+dä* 'in the sky and on earth' and the near-synonyms *üzülmäkli öčmäkliniŋ ... taplagï* (BT I D 250) 'the acceptance of ending and extinction'.

3rd person possessive suffixes preceding *+lI* normally have the 'pronominal' *+n+*; e.g. *bašïnlï adakïnlï iki yïlta* (Ht VII 16 b 5-6) 'within two years, from beginning to end' with cataphoric *+(s)I(n+), tïltagïnlï nom tözinli ikigüni* 'both their cause and their dharma root'[284] (Myōhō B r 6), *tüšinli tïltagïnlï* (BT I D 279) 'their effect and their cause', *isig özinli* ... (DKPAMPb 380) 'his life and ...'. The instances in the following sentence lack pronominal *+n+*: *šakimuni burxannïŋ säkiz ulug čaytïlarïlï, grtïrakut tagda ulatï adïn öŋi on buluŋ yïŋaklartakïlï, adïn öŋilärtä ymä y(a)rlïkadačï nomlug ätözlärkä ymä äŋitip öčmiš amrïlmïšlarka ... yükünür m(ä)n* (Suv 32,19-21) 'I bow to the *dharmakāyas* and to those who have found peace in the eight great *caityas* (*+lI*) of Buddha Śākyamuni, in the other ten corners and directions (*+lI*) of the earth of which the foremost is mount Gṛdhrakūṭa, or elsewhere'.[285] *mäniŋ tüšämiš tül+üm+li* 'the dream I dreamt and ...' (MaitrH XIII 5r14) is an instance with a 1st person possessive suffix.

In *ädgüli ayïglï kïlïnčlarnïŋ tüšläri täggüdä* (BT II 925-928) 'when the retribution for good and bad deeds arrive' the suffix gets added to a pair of adjectives in adnominal use.

In some instances one member of a couple lacks *+lI,* e.g. *täŋrilärli kinarïlar üzä sävitilmiš* 'loved by gods and *kiṇṇaras*' (ATBVP 37).

Double *+lI* lives on in Middle Turkic, e.g. in the Qiṣaṣu 'l-Anbiyā (Ata 2002: 68) and in modern languages.

3.124. Case

When case morphemes followed directly upon possessive morphemes, there was some fusion. There are three case paradigms, then: One for bare nominal stems and nominal stems ending with the plural suffix or *+lI*, a second, fused one for stems with a possessive suffix and a third

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[284] The accusative suffix *+nI* may be explained as 'pronominal' (as in *bizni*) in view of the shape *+(A)gU(n)+* which this suffix has in Orkhon Turkic or this may be the late Uygur extension of *+nI* at the expense of *+(X)g* (or both).

[285] There is here a tripartite classification of places; however, the third member of the series (*adïn öŋilär*) does not get the element *+lI*, perhaps because it is merely a residual and non-specific category, though it does get the locative suffix intended for all three. In Taryat E3, a runiform inscription of the Uygur kaganate, one could, in principle, read *ötükän+li tägrä+si+li äkin ara* 'between Ö. and its surroundings', but *ötükän eli tägräsi eli äkin ara* could be spelled in the same way and would give a very similar meaning. T. Tekin reads *Tägräs eli*, taking '*tägräs*' to be a place name.

one for pronouns and pronoun-like nominals. As a historical development within Old Turkic, pronoun declension was extended to more and more nominal domains, presumably because a pronoun has a higher textual frequency than most nouns.

There are approximately twelve case morphemes in the pure nominal declension; examples for case forms are given in section 4.11 and its subsections. Some case forms, e.g. the ablative or the instrumental, have different shapes in different text groups; there was no point in illustrating this with different tables in this work, however, as the spelling of some sources (e.g. the runiform ones) is equivocal, and as text grouping is all but clear. Suffixes with variable shapes are the genitive, the ablative and the instrumental; the directive is not very common in Buddhist and lay texts, and the comitative is outright rare there. The *+rA* suffix has two different historical developments in different semantic and functional domains. The Old Turkic case system is thus a very rich one, even in those texts which lack one or two of its members.

The nominative case form consists of a nominal with no case marking.

The genitive suffix has two main variants: *+(n)Xŋ*, with /n/ dropped after consonants, is used in the runiform inscriptions (e.g. *čor+uŋ* in KT E32, *bäg+iŋ* in E33) and a few other early texts, notably runiform mss. (e.g. BlattRun 2, 3 and 26 and the IrqB) and Manichæan sources (*kišilär(i)ŋ* in M III nr. 8 VII r7 (22,7$_1$).[286] There seem to be no genitives in the inscriptions of the Uygur steppe empire. An /n/ appearing in this way only with stems ending in vowels is not attested with any other Old Turkic suffix: This suffix may possibly prehistorically have been transferred from the pronominal declension, where there is the so-called pronominal +n+, by metanalysis.[287]

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[286] Numerous instances read as *+n(a)ng*, *+n(ä)ng* by Le Coq in Manichæan texts, e.g. in M I 14 title, 16,11-12 and 17,20 can be read as *+Aŋ* instead, and vice versa. The latter reading would imply a lowering of the suffix vowel, which in fact does not happen very often in front harmony words even in Manichæan texts.

[287] Róna-Tas 1998: 73 thinks "Proto-Turkic nouns probably had an oblique stem in *-n*, just as pronouns still have in Old Turkic". As evidence for this he gives, beside the genitive suffix, an accusative suffix which he reconstructs as **-nVG*, a dative suffix **-nKA* and an instrumental suffix **-nVn*. There is, however, no way to reduce the nominal and the pronominal accusative suffixes to any common source by any sound laws known to have held for that stage of the language, and there is no evidence whatsoever that the dative and the instrumental suffixes ever started with an /n/. So the genitive suffix remains by itself, and 'oblique *-n*' remains a purely pronominal feature (found,

The vast majority of Uygur texts, however, always shows the suffix with /n/ also after consonants, e.g. *maytri bodïsavt+nïŋ*. Exceptions, such as *äv+iŋ yutuzïŋa yazïnmak* 'to sin with a married woman', the title of the third chapter of the DKPAM, need an explanation: In this case I take *äviŋ yutuzï*, literally 'a woman of the house', to be a lexicalised phrase created before the generalization of *+nXŋ*.

Qarakhanid has a dissimilative variant *+nXg*,[288] Orkhon Turkic a different dissimilative variant *+Xn* appearing after /ŋ/. We find *+nUŋ* in two Manichæan hymn titles, *vam vaγïnuŋ baš* 'the hymn of the god Vam' and *b(a)γ roš(a)n zaw(a)r žiriftnuŋ bašta* 'the hymn to god, light, power, wisdom' (M II 9 and 10).[289] Conversely, *+nIŋ* appears, e.g., in *bayagutnïŋ* in Ht III 507. Sometimes the vowel is implicit, or is spelled as a low vowel, e.g. *bägnäŋ* in U IV A152, *kišinäŋ* in M I 8,15. The vast majority of instances do, however, have /X/.

In the pronominal domain, the genitive form can be expanded by other case suffixes, e.g. *öz+in+iŋ+čä* 'like his own' (M III 22, 14_1); it gets the plural suffix in *män+iŋ+lär ol* 'they are mine' (U III 27,16) and has the derivate *män+iŋ+siz* (in the common Buddhist phrase *mänsiz mäniŋsiz* 'selfless', put into the accusative in Suv 210,21). *biziŋ+tä+ki+čä* 'as in the one belonging to us' is attested in Suv. Cf. inflecting possessive pronouns like Danish *min*, neuter *mit*, pl. *mine* 'mine' or *sin*, neuter *sit*, pl. *sine* 'his own'.

In Buddhist Uygur, genitives of nouns can get their head deleted and be put into the locative case form; this is either used with comparative meaning or governed by postpositions. In what follows, these postpositions are *ulatï, öŋi* and *artok* respectively; in the second instance the possessive suffix inherited from the original head is retained. *kulgaknïŋta ulatï adïn biliglär* 'the other senses, (i.e.) the sense (*bilig*) of hearing (lit. 'the one of the ear') etc.' (Abhi A 3704, referring to the senses other than the sense of sight); *ädgü ayïg nomlarnïŋ čïnžu tözi ädgün barmïšlarnïŋïnda öŋi ärmäz* (BuddhUig II 447) 'The *tathatā* (= Chin. *čïnžu* for this Sanskrit term) nature of good

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however, also with the collective suffix *+(A)gU* in Orkhon Turkic, and also the possessive suffixes) as far as Turkic is concerned. While Turkic had an oblique pronominal *+n+,* Mongolic nominal vowel stems had a nominative *+n* denoting specificity.

[288] Appears rarely elsewhere as well, e.g. TT X 520. Tekin 1968: 127 mentions an instance for a variant *+Xg* of this suffix from KT E25, the form *bodun+ug*; while this variant *may* be the result of dissimilation after /n/, the context makes it more likely for it to be a regular accusative in the accusative + finite verb construction (cf. section 4.622).

[289] This is the shape of the genitive suffix also in Early Anatolian Turkish. Cf. the rounding in flexional suffixes presumably caused by labial consonants in some Manichæan mss. and mss. in Sogdian script ('Argu'; section 2.402).

and bad principles is not different from the one of the *sugatas (ädgün,* adverbial instrumental, *bar-mïš+lar* 'the ones who walked')'. In the first case one instance of *bilig* (which could have served as head of *kulgak+nïŋ*) is deleted; in the second one *barmïšlar+nïŋ+ïn+da* is equivalent to *barmïšlarnïŋ čïnžu tözinda*. Similarly *burxanlarnïŋ tïnlïglarïg ... ömäki ögnüŋtä kaŋnïŋta takï artok üčün* (Warnke 195) 'because the Buddhas are considerate ... of the creatures even more than mothers and fathers', where the phrase *tïnlïglarïg ... ömäki* is deleted. Another such instance from Warnke 211 is quoted in UW 211b. Cf. further *kalavink+niŋ+dä* (Suv 646,6) from the name of a bird, with *ün* 'voice' to be understood from out of the context. In *yarumïš ol öŋräkilärniŋdä, ärtmiš ol amtïkïlarnïŋda* (Ht VII 199-201) the word understood from the context is *swö bašlag* 'preface': 'It turns out that it overshadows those of the previous ones (i.e. the previous authors) and surpasses those of the present ones'. Instances such as *baxšï+nïŋ+ta+kï+ča* (Abhi A 3537) are comparable to Turkish adding *+kI* to the genitive suffix in the sequence *+nIn+ki(n+)* to integrate the genitive form as noun phrase without its head. Old Turkic does not, however, add *+kI*: This is similar to the phenomenon which has, in connection with Romani and Hurrian, been called 'Suffixaufnahme', although the genitive in those languages gets the head's suffixes also when attributive (which would be impossible in any Turkic language).

The <u>accusative</u> has the suffix *+(X)g*; as stated in Erdal 1979, this is replaced by the pronominal accusative suffix *+nI* in the latest Uygur sources. This happens mostly when stems end in a vowel, e.g. *yanturdačï+nï* in U II 58,3. Further, *ayalar+nï* in U II 46,70, *yerni mä karï kišini*[290] in UigBrief C12, again *kiši+ni* in TT VII 25,6. Occasionally, this suffix appears in early texts as well, e.g. *savl(ï)g ätözni arta(t)dïmïz* in Maitr 177r7.[291] In loans *+nI* appears more often and turns up at an earlier stage of the language than in native Turkic words; e.g. *darni+ni* 'the incantation formula' (< Skt. *dhāraṇī*) in U II 38,69. Nouns such as *barča* and *tüzü* 'all', whose use is not far from that of pronouns, have the *+nI* ending also in classical Uygur (e.g. in Ht

[290] This particular instance may possibly have been contracted from **yeriŋni mä karï kišiŋni (unïtmïš bolgay sän)* 'you will have forgotten your home and your old wife' (or ‚relatives'). But, on the other hand, this text uses a very late language, with VdV > VyV and *özgä* 'other (than)'; the use of the particle *mA* after nouns (and not just after pronouns) is also particularly late.

[291] The content of this sentence is not very clear; cf. UW 209b in section 5 of the entry for *artat-*.

VIII 21, Pothi 68). Zieme 1991: 24-25 gives some statistics on the relative appearance of *+(X)g* vs. *+nI* in Uygur verse.

The dative suffix for substantives is *+kA* in all varieties and stages of Old Turkic. Irregularities occur when it follows the 1st and 2nd person singular possessive suffixes, which show pronominal behaviour; these are dealt with below. *+kA* is today found only in Khaladj. According to DLT fol. 537-8, the Argu used this same form; Kāšġarī appears not to have been aware of any other Turkic group of his time using it beside them. Evidence for *+gA,* which can be assumed to have existed in early Turkic beside *+kA* because of Oguz and Bolgar-Chuvash *+A*, is exceedingly weak in Old Turkic. Based on Kāšġarī's statement and on what he takes to be evidence from Old Turkic texts in runiform script, Doerfer 1987 set up the theory that the Old Turkic dative was pronounced as *+gA*, and that it did not use the characters for /g/ because those were pronounced as fricatives and not stops. For that purpose he refers to both the simple dative forms and the ones appearing after possessive suffixes as we find them in the Yenisey inscriptions. We will separate the two sets of forms, to deal with the possessive forms further on. Runiform evidence is such that we practically always find +k^1A / +k^2A. This evidence is overriding also for the Yenisey inscriptions, with two exceptions: *+gA* appears in E11 D1, in the sentence *beš yegirmi yašïmda tavgač kanga bardïm* 'When I was fourteen years old I went to the Chinese king', and in E45 5 in the sentence *kök täŋridä küngä azdïm* '(When I was sixty years old) I lost the sun in the sky'.[292] The other runiform text in which we find a *+gA* dative is ms. IV in the Stein collection published by Thomsen, a short administrative (or perhaps military) letter. The dating of this text in irregular cursive characters (perhaps the only runiform ms. not written with a pen) reads *bešinč ay säkiz yegirmigä* 'in the 5th month, on the 18th'. The Manichæan script

[292] The fact that both bases end in /n/ may or may not be a coincidence. Doerfer thought there were *+gA* datives also in E40 (the Tašeba inscription) and E22. In E40, Radloff and Vasil'ev were apparently wrong in reading *elgä*: Kormušin 1997: 128 reads the word as *el(i)m*. Kurt Wulff, in his unpublished edition of the Yenisey inscriptions, writes about the space after I^2: "svage spor, der snarest kan tyde på g^2, muligvis m" (he actually supplies drawings of all these characters), i.e. 'weak traces, which most likely indicate g^2, possibly m'. He adds: "Mellem dette og t^1, hvor Radloff, Atlas har A, synes der ikke at have stået noget bogstav", i.e. 'Between this and t^1, where Radloff, Atlas has A, there appears not to have stood any letter'. Vasil'ev does not actually give any photograph of this inscription, and the letter which does not exist according to Wulff and Kormušin is in his hand-drawing drawn like a miniature I and not an A. In E22, where Vasil'ev writes *(ä)lgä*, the text actually reads *üč (ä)l(i)g y(a)š(ï)m da* (thus, with an erroneous : before the locative suffix), i.e. 'when I was 42 years old'.

distinguished between /k/ and /g/ when appearing both in front and in back syllables. Again the overriding majority of examples shows *caph* or *coph*, but the texts occasionally write G / Γ: We find *üdgä* in M III nr.12 v 3, e.g., and *ätkä kanga* 'concerning meat and blood' in WilkManKat nr. 65 r 1. In *bastan* (thus) *adaka tägi kanka iriŋä örgänip* 'besmirched in blood and pus from head to foot' (M I 5,14) we find the two velars simplified in *adak+ka* and the suffix velar assimilated to the nasal of *iriŋ* in what is spelled as 'YRYNNG'. In TT VIII (Brāhmī) there are 63 instances of *k* as against 3 spelled with *g* (which is well within the limits of normal error found in Uygur Brāhmī mss.). The (original version of the) Arabic script as used for writing Qarakhanid does not distinguish between /k/ and /g/ in front syllables, but back syllable words consistently use *qāf* and not *ghain* for spelling the dative both in the DLT and the QB. *Ghain* was, of course, a fricative, while *qāf* may have been pronounced as a voiced and not an unvoiced uvular stop in Arabic dialects even in Kāšġarī's time. So Qarakhanid evidence does not contradict Doerfer's theory that the dative suffix was pronounced with a voiced and not an unvoiced uvular or velar stop; but he *may* possibly be right even as far as Old Turkic is concerned: The so-called voiced characters may not generally have been used as they in fact indicated voiced fricatives and not stops. Just possibly (but by no means necessarily), a stop [g] (as against a fricative) could also be meant when using K. Doerfer's theory would also explain the Proto-Oguz, Bolgar-Chuvash and general Middle Turkic[293] emergence of *+gA* as the dative suffix and, of course, Kāšġarī's statement on Argu pronunciation: The voiced stop, which the phonemes /k/ and /g/ could be sharing in that it might have existed as variant in the word (or syllable) onset for the latter and in all other positions for the former, might have served as pivot, getting at first (at the Old Turkic stage) generalised from the post-vocalic position to all positions, and then receiving (after Qarakhanid as far as Eastern Turkic is concerned) the fricative variant beside it. But there is very little in the Old Turkic documentation to speak *for* this view. Another possibility is that *+kA* was primary and that the emergence of *+gA* is due to the influence of the directive suffix (which always had /g/ and was not related to the dative).

Old Turkic has no *+A* or *+yA* dative, as maintained again and again by Gabain 1974: 87 and others, especially T.Tekin 1996a, who intend these to be linked with one of the Mongolic suffixes serving as

[293] A form *'čaqlarγa'* which is in Doerfer 1993: 49 said to appear in Džumagulov 1971: 111 is in that work found neither on that page nor in the index nor in the section devoted to the dative.

dative.[294] It cannot be excluded, however, that Mongol copied an *+A* dative from a Turkic language of the Bolgar group.

Doerfer 1977 had tried to explain the fact that the dative forms of the 1st and 2nd person singular personal pronouns are back vocalic (see section 3.131) by assuming that the dative suffix was originally a noun **ka*, which later became a suffix. When Johanson 2001: 1726a makes the unwarranted statement "Im Ost-Alttürkischen[295] war ... das Dativsuffix *+qa* ein hinteres Suffix" he is presumably following this quite hypothetical proposal concerning Proto-Turkic.

The locative suffix *+dA* serves also in ablative use in the earlier part of our corpus; see the ablative below. The distribution of the two sets of alveolar characters in the Orkhon inscriptions is documented in T.Tekin 1968: 133: It turns out that d^1 and d^2 are here more general than with the constative preterite: t^1 and t^2 are here the rule only when the stem ends in /l n/, with /r/ generally followed by the D runes like the other consonants. We also find *köl+tä* 'at the lake' with t^2 in ŠU S6. The rule holds also for pronominal forms spelled as *bunta*, *anta* and *bizintä*. r^2(I)$g^2y^2r^2t^2$A (KT S13 twice) is an exception if correctly understood as *ärig yertä*;[296] a number of other instances of *yer* get /d/ in the locative suffix. k^2čn^2d^2A in Küli Čor may be another exception, or this place name may have had a vowel after the /n/. Twice *ölümtä oz-* in IrqB 49 and *ayakïmta idišimtä* in IrqB 42 are also against this rule.[297] In Manichæan sources (as documented in Zieme 1969: 112-114) we find the spelling with T in *čaydanta, eltä, xanta, oronta, yolta, ažunta, köŋültä, tultonta* and often after the possessive suffix *+(s)In+* and in pronouns, i.e. again after /l n/. Here the exceptions are *yerindä* in M III 8 I v1 on the one hand and *yertä* (as in Orkhon Turkic) in TT II,2 10. In

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[294] The datives *adaka* and *suvsamaka* mentioned by Gabain show the very common simplification of velars, and the *+yA* forms mentioned there appear to belong to the directive-locative case as described below. The first word in inscriptional *bïŋa bašï* refers to some military unit which is presumably related to *bïŋ* 'thousand' in view of Mongolic *minggan* (same meaning). Old Turkic does not, in any case, use adnominal datives. *ača* in TT IIA 37 is the converb form, as correctly noted in UW 37b.

[295] This is Johanson's name for what we have called Old Turkic (which *is*, of course, documented best form the eastern part of the Turkic world).

[296] Here, in T.Tekin 2003: 76, 113 and in glossaries of all the reeditions of the Orkhon inscriptions by T.Tekin, he mentions an instance of *yertä* also in BQ N15; no such word occurs in this line in any of the editions I have looked at, and I have not come across it anywhere else in that inscription. It may, however, appear in Tuñ 47 according to some readings.

[297] Erdal 1997a: 69 mentions IrqB irregularities also for the constative preterite.

the Pothi book, which is a late text, the rule is not observed; nor is there any rule in Brāhmī sources. In Qarakhanid mss. we generally find voice assimilation, i.e. *+tA* after voiceless consonants and *+dA* otherwise; but cf. *ïš+da* in DLT fol. 402.

The ablative suffix appears as *+dIn* in most Uygur sources, where *+dA* serves as locative only, as well as in Qarakhanid. The variant *+dAn,* today found everywhere except modern Uygur, is attested in preclassical and/or Manichæan texts, e.g. as *ögüzdän* or *sütdän.* In these sources, the alveolar is generally spelled as D except after /n/. There are examples also twice in BT V 172 and in 501 (*täŋrilärdän*), DreiPrinz 96 (*J̌iglärdän*), M I 5,13 (*baštan*, an exception in the spelling of the alveolar), 7,2 (*ïgačdan*), 17,19 (*töpödän*) 22,4_1 and 7_2 (*täŋridän* and *yerdän*) and M III 28,8_5 (*yerindän*) and 42,17 (*täŋrilärdän*). The DLT ms. has both *+dIn* and *+dAn*, e.g. *suv arïktïn kardï* (fol. 525) 'The water overflowed from the canal' vs. *kul täŋridän* (with *dāl,* not *dhāl*) *korktï* (fol. 627) 'The worshipper feared God'; both the I and the A of the suffixes are by the first hand.[298] The vowel of *+dAn* may have been taken over from the locative suffix *+dA* by analogy, or, conversely, the most common variant *+dIn* may have come about secondarily, through influence by the orientational suffix which has a similar shape when not rounded. These appear to be morphological variants, but in Manichæan texts *+dAn* could also be part of the (phonological, phonetical or merely graphic) lowering of vowels also found in this group of sources. Zieme 1969: 177-8 brought together the evidence for ablative meaning in Manichæan texts. Most of the instances do not have any ablative suffix and use the *+dA* suffix for ablative content. Some have *+dAn* as quoted above, but *+dIn* is rare in Manichæan sources: The only ones which have it (and no *+dAn*) are the Pothi book and the passage M I 29-30 (which is a very late reader's addition to a text). In the runiform inscriptions, e.g. in *kand(a)n* 'from where' in KT E23, the vowel of the suffix is never explicit.[299] However, in *Oguzdundan* (Tuñ 8) 'from the direction of the Oguz', where it is added to the orientational suffix *+dXn*, both suffixes are spelled without explicit vowel: This means that the inscriptional ablative suffix has to be read with *A*, because its vowel

[298] In their grammatical sketch, Dankoff & Kelly 1985: 323 tacitly change this last instance to *täŋridin*. In fol. 574 the ms. (first hand) has *buzdun* 'from the ice' with ablative meaning, by the editors again changed to *'buzdïn'*.

[299] In this and in all the runiform examples of the ablative to be mentioned here, it follows an /n/ and is spelled with the ligature, so that its alveolar must be [d], to be assigned to the /d/ phoneme.

would (after a rounded vowel) have had to be explicitly spelled as I if the inscription had had the ablative suffix as *+dIn*; whence I prefer the reading *+dAn*. Following this logic I read *tašdïndan* 'from the outside' in a runiform inscription of the Uygur kaganate, ŠU S4 (twice), although the last vowel is again implicit.[300] The same sequence of suffixes is found also in *üstüntän kalïkdan* and *üstüntän kudï* (M III nr. 8,VIII r 4 and v 10 respectively) and in *üztüntän enip* 'coming down from above' (Hymnus 10). In those early texts, where the locative form also has ablative meaning, the ablative form itself appears to be used mainly after *+dXn*. Among Buddhist texts we find *+dAn* in the Säkiz Yükmäk Yarok edited in TT VI; the London scroll (as documented in Laut 1986: 87) has it as *täŋri yerintän* 8 times in 406-416, as *kün ay täŋridän* (404) and *taloy ögüzdän* (44). Similar to Manichæan texts the London scroll of TT VI has no instances of *+dIn* and ablatival meaning is normally covered by the suffix *+dA*. The Maitr, an extensive pre-classical text, has no *+dAn* but only *+dIn* (e.g. *tamudïn* in MaitrH XX 14v1). Laut 1986: 70, 77 notes that the Hami ms. of this text has only *+dIn* in ablative meaning whereas the Sängim ms. shows *+dA* in ablative meaning beside *+dIn.*

The shape of the <u>instrumental</u> suffix changed from fourfold to twofold harmony in the course of the development of Old Turkic: We find *+(X)n* in the runiform inscriptions and most Manichæan instances, but other sources have *+(I)n.* This alternation can also be seen as related to a dialect difference, but that is less likely in view of the fact that petrified *+(X)n* forms are found in Buddhist sources as well: There are e.g. dozens of examples of *üd+ün* from *üd* 'time' in the Suv. The difference is, of course, visible only when the base has a rounded vowel. We have *ok+un* (KT E36) 'with an arrow', *bo yol+un* (Tuñ 23) 'by this way', *küz+ün* (ŠU E8) 'in autumn', *korug+un* (KT N8 & BQ E31) 'at the reserve', *biltökümün ödökümün* (KČ S3) 'with what I know and remember' and so forth.[301] In Manichæan sources we find *üdün* (often) 'at a (particular) time', *sözün* (Xw 102 in ms. A; *sözin* in B and J) 'with words', *özün* (Xw 111 and 112; in Xw 149 ms. B against *özin* in A and C) 'with a (particular) identity', *köŋülün* (Xw 149 and 157, M III nr. 15 r 17) 'by the heart', *közin kulkakïn tülïn älgin adakïn* (Xw 207 both ms.)

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[300] What the editors read as *taštï[r]tïn kälip* 'coming from outside' in MaitrH Y 164 could as well have been *taštï[n]tïn kälip*, but cf. *ičtirtin* on p. 239 and footn 357.

[301] The instance in *anta ötrö oguz kopïn kälti* (Tuñ I S9) could possibly be translated as 'thereupon the Oguz came in their entirety', with the possessive suffix *+(s)I(n+)* before the instrumental ending.

'by the eyes, the ears, the tongue, the hand, the foot', *äsrökün* (M I 6,16) 'by drunkenness', *körkün* (M III nr. 7 III v 12, BT V nr. 25 v 11-12, ms. U 128a in BT V n. 574 = ZiemeSermon v 5) 'by shape'[302] or *ögrünčün* (TT II,1 66) 'with joy'. As stated, Manichæan texts generally have *+(X)n* unless there is parallelism with stems in unrounded vowels (as in Xw 207 just quoted); Zieme 1969: 177 has brought together the (limited) Manichæan evidence for *+In*: Only the Pothi book, the Yosipas fragment and one of Afrin Čor's poems (M II 7-9) have *+(I)n*, not *+(X)n*.[303] In the DLT we find fourfold-harmony instrumentals such as *köz+ün* 'with the eye' and *köŋl+ün* 'with the heart'. Buddhist texts (where the instrumental is also very common), on the other hand, always have *+(I)n*, e.g. *otïn suvïn* (MaitrH XX 13r10) 'with fire and water' or *ötüglügin* (Ht VIII 68) 'by having requests'. In *baltun* 'with an axe (*baltu* or *balto*)' (MaitrH XVNachtr 3r26) or *ädgü+n barmïš* corresponding to Skt *su+gata* e.g. in BuddhUig II 447 the suffix is added to a stem ending in a vowel. Cf. also section 4.1110 below.[304]

alkugun and *kamagun* 'altogether' are instrumental forms put to adverbial use.[305] The instrumental suffix was also added to the postpositions *bi(r)lä* and *öŋi*: Originally it probably applied to the postpositional phrase as a whole, putting it to adverbial use; in late Uygur, however, *bi(r)län* becomes a variant of *bi(r)lä*. *birökin* 'however' (MaitrH XV 3v4) shows the particle *birök* with the instrumental suffix. It appears, further, to have been added to the comitative case suffix *+lXgU* / *+lUgU* and to the converb ending *-mAtI*. The etymology of the converb endings *-(X)pAnXn* and *-(X)pAn* may possibly be linked to a demonstrative instrumental as may the imperative form *-zUnIn* (as explained in sections 3.231 and 3.286). The sequences *+sXzXn* and *-(X)nčsXzXn* are also common: The instrumental suffix is often added to the privative suffix *+sXz* (and to *-(X)nčsXz*) as

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[302] The noun in *körgün* (thus, with G, in Manichæan script) *tägšürüp* of U 128a v5 is not an error for accusative *kör+in* (facs. clear): *körkün tägšil-* in BT V 574 shows that the instrumental is appropriate.

[303] *ulug ünin üntädi maŋradï* (M III nr. 3 v 12) could possibly be understood as 'He shouted and bellowed with *his* loud voice' with the possesive suffix before the instrumental.

[304] The statement in Johanson 1988: 142 that "It is a well-known fact that the Old Turkic instrumental in {(X)n} already ceases to be productive in Uighur" is certainly misguided.

[305] Not instances of a suffix *+kün*, *+gün* etc., as proposed in Gabain 1974 § 50. The other forms mentioned in that paragraph belong to the collective suffix *+(A)gU* which is used in runiform inscriptions with the pronominal *n*. However, pronominal *n* appears only before case suffixes (and is not attested with this suffix outside those inscriptions).

well as to its opposite *+lXg* when they are put to adverbial use. The suffix *-(X)pAn* clearly related to *-(X)p* and front low forms in early texts as *ärklig+än* and *siziks(i)z+än* in TT VI 90 and 305 respectively make it possible that there was an early variant of the shape *+An* as well.

The equative suffix is *+čA*.[306] It is unstressed in modern languages and presumably was so in Old Turkic as well. The element *+čI+ / +čU+* found in some personal and demonstrative pronouns and in *bulïtčïlayu / bulïtčulayu yïg-* (Ht III 637 and V 320) appears to come from *+čA+lAyU* through a process of vowel raising; see section 2.401.

The directive in *+gArU,* signifying 'towards' is very much alive for both nominals and pronouns both in Orkhon Turkic and in Manichaean texts but is not too common in the rest of Uygur (which is generally later); cf. *tavgačgaru* (BQ E35) 'towards China' or *küngärü* 'southwards' (TT V A71). *ilgärü* 'eastwards', e.g. in KT E 2, ŠU E8 and often elsewhere, and *apa tarkangaru* (Tuñ I N10) 'to A.T.' show that runiform inscriptions did not spell the velar of this suffix as K after /l n/ (I am not aware of any example with /r/). The scarcity of *+gArU* in Buddhist Uygur and Qarakhanid Turkic can be explained as a reduction of the case system in the course of historical development, but another explanation is possible as well: The shape of the directive is identical with the vowel converb of denominal *+gAr-* verbs (OTWF section 7.53), and *may* well come from it. With *+lAyU* we have another example of a secondary case form which we find to be already well established in Orkhon Turkic. There is no doubt about the relationship between *taš+ïk-* 'to go out' and *taš+gar-* 'to get out', *ič+ik-* 'to go in' and *ič+gär-* 'to get in' and we know that petrified converbs of causatives lose the causative meaning of their source (OTWF passim). *bir+ik-* 'to gather at a place' and *birgärt-* (OTWF 767) are highly likely to be related to *birgärü* 'into one place', which has directive meaning. This latter, *ičgärü* and *tašgaru* are among the most common of directive forms in the whole of Old Turkic. So it might just be that the absence of a living directive in Buddhist Uygur should not be explained by loss but by limited evolvement in a particular dialect. A third possibility is that the directive came from contamination between such petrified converbs and the pronominal dative in **+gAr*; note that Tuvan has (or had in the

[306] There is no diminutive or intensive suffix of this shape in Old Turkic, as professed in Gabain 1941: 59; the only two examples in her § 45 which do have this meaning among the ones mentioned do so by virtue of the base or some other suffix. The Ottoman diminutive suffix *+čA* was borrowed from Modern Persian.

last century) such directives as *puruŋγar* 'forwards; to the east', *soŋγar* 'back; to the west' and *küŋgär* 'towards the sun'. Deictic directives such as *ičgärü, tašgaru, öŋärü* and *artgaru* ('in, out, forwards, backwards') survive into Middle Turkic.

Some scholars thought they could identify the first syllable of *+gArU* with the dative suffix and the second syllable of the suffix with the suffix *+rA* dealt with straightway; others have even treated *+gArU* and *+rA* as one suffix. However, the velar of the dative suffix is shown to belong to the phoneme /k/ wherever the script used is explicit enough for this purpose, with quite few exceptions; the velar of the directive, on the other hand, consistently belongs to the phoneme /g/ in runiform, Arabic and other writing systems.[307] The vowel of the second syllable of *+gArU* is different from that of the well-attested case suffix *+rA*. The only things the two suffixes share are the general local content on the semantic side and the sound /r/ as to phonic shape; they are quite distinct also in their historical development. Still other scholars (among them Gabain 1974, Clauson in the EDPT and now Hesche 2001: 53) believe in the existence of a directive suffix *+rU*: It is supposed to have appeared in *kerü* 'back', *bärü* 'hither', *+(X)mArU* (1st person sg. possessive directive), *tapa+ru* 'towards' (adverb and postposition in DLT fol.473, QB 521 and 5830 in all three mss. and in two other instances only in the late A ms. and in Middle Turkic as documented in Hesche 2001: 54) and, as proposed by Hesche 2001, in a postposition *sïŋaru* which he derives from *sïŋar* 'direction'. I would take both of these words to come from the putative pronoun which became one of the two allophone clusters of the 3rd person possessive suffix *+(s)In+, sïŋar* being similar to the datives *aŋar* and *muŋar*. *taparu*, apparently created secondarily out of a need to make the directive content of the postposition *tap-a* 'towards' explicit, is not, however, attested in Old Turkic proper. The suffix *+(X)mArU* being formed in analogy to the 2nd person like dative *+(X)mA* and *bärü* not having an obvious base, we would be left with *kerü* as the only word in which *+rU* would be early. I take that as well to come from **ke+gärü*.

There are two different functions of *+rA* in Old Turkic, and they differ in their historical development: The <u>directive-locative</u> in *+rA* is attested only with a limited set of nominals: We find it e.g. in *öŋrä* 'to the front

[307] What has been read as *yagïkaru* in DLT fol.310 and translated as 'towards the enemy' in fact contains a verb *kar-* 'to oppose', the base of the verb for which the DLT gives the example *iki bäglär karïštï* 'The two *begs* quarelled and fought'; this, in turn, is the base for *karšï* 'adversary etc.'. The ms. spells *yaġï* and *qaru* separately.

(or east)', *kesrä*[308] 'to the back (or west)', *tašra* 'outside', *ičrä* 'inside', *asra* 'below' (see the UW for the latter).

Then we have the use with body parts, e.g. in *töpörä* 'on the head' (e.g. in Suv 7,22, 620,18, 627,3), here called partitive-locative. Examples for this in section 4.1107 show that, as partitive-locative, *+rA* did clearly stay alive in Uygur. *+rA* appears to have been incompatible with possessive suffixes in either use, though both uses were bivalent: The directive-locative, being deictic, was inherently linked to the place and time of speaking, while the partitive-locative applied only to inalienable parts of a creature's body.

Directive-locative *+rA* was dissimilated to *+yA* when the stem had an /r/: *beriyä* 'in/to the south', *yïrya* 'in/to the north', *kurïya* 'in/to the west' < **berira, *yïrra, *kurïra*; cf. e.g. Orkhon-Turkic *kurïgaru*, *b*^{e}*rig*^{ä}*rü* of the Uygur Steppe Empire Taryat inscription (W5). *üzä* 'above' might also have been formed in this way, as one source of Old Turkic /z/ is Proto-Turkic **ry*; its base could have survived in Chuvash *vir* 'upper'.[309] The variant *+yA* cannot be connected with the dative suffix, as was thought by some,[310] both because of the different meanings of the forms and because *+kA* often appears in the same phonotactic surroundings as *+yA*. All the instances of *+yA* are, like directive-locative *+rA*, petrified and lexicalised. Most important, the meanings and functions of *+yA* and the directive-locative fit together perfectly.

The similative suffix *+lAyU* no doubt comes from the vowel converb of denominal verbs ending in *+lA-*. However, it is a full-fledged case already in the Orkhon inscriptions; i.e. there needn't have been a *+lA-*verb to have served as base for every *+lAyU* form attested: We there find it in the expression *op+layu täg-* 'to attack like a threshing ox'. Cf. OTWF 408-409, where much of the documentation is quoted; *+lAyU* does not seem to appear in any Manichæan source. Clauson 1962: 146 is wrong in thinking that it is "usually, perhaps always, attached to the name of an animal", although there is such a group of instances.

In *+čUlayU* in *yaŋalïg süö bulïtčulayu yïggay män* (Ht V 320) 'I will amass an army of elephants like a cloud' and, again as *bulïtčïlayu* (thus!) *yïg-*, in Ht III 637 *+lAyU* appears to have joined a variant of the

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[308] Possibly syncopated from **ke+sin+rä,* from a stem attested in *ke+n*, *ke+din*, *ke+č*, *ke+čä* and *kerü* (< **ke+gärü*).

[309] All directive-locative items turn out to appear in opposite pairs and *üzä* would be the counterpart of *asra*. Another cognate is *üstün*, discussed in this section.

[310] E.g. Tekin 2003: 78. That *+yA* may have been a secondary form of *+rA* was assumed already in the EDPT (p.XL) and is argued against by T.Tekin 1996a: 330-31.

equative suffix. Another instance should probably read in *kapil(a)vas[tudïn] kür[ä]gčüläyü ünüp* (MaitrH I 2v21) 'leaving Kapilavastu like a fugitive'. The personal and the demonstrative pronouns also have forms with this extended suffix *+čXlAyU* / *+čUlAyU* (sections 3.131 and 3.132).

The comitative *+lXgU* is rare and early; it has not turned up with pronouns. We find it in *ini+ligü* and *(eki üč kiši)+ligü*[311] in the Orkhon inscriptions. This form has been linked to the Yakut comitative and to Mongolian *+lUgA* in Gabain 1974: §424[312] and Zieme 1969: 254 (n. 682), later also by Tekin 1991 (who lists all known instances) and Stachowski 1995, the last three arguing against other etymologies.

In Manichæan sources the comitative has the shape *+lUgUn*; section 4.1111 gives examples with unrounded bases. Another instance with unrounded base is *iki kutlug el[ig]lär kamag tegitlärin kunčuyl[arï]n tözünlärinlugun* (DreiPrinz 119) 'the two blessed kings together with all their princes, wives and retinue'; not (for some reason) adhering to palatal harmony makes it similar to a postposition. Furthermore, the case suffix is here shared by three nouns. The form in the instance *š(ï)mnulugun* 'with the devil' (Xw 4) is therefore no doubt also to be interpreted as *+lUgUn*, although its first vowel could here also have been taken to be /X/ (since the base ends in a rounded vowel). The Manichæan variant shows comitative *+lUgU* followed by the instrumental suffix *+(X)n*: The use of the comitative appears to have been getting forgotten, demanding an expansion with a well-known case suffix of similar meaning. The Yakut comitative *+lX:n* clearly comes from the same expansion. Mongolian *+lUgA* is better linked with *+lXgU* than with *+lUgU(n)*, as Mongolian /U/ corresponds to Turkic /X/. Whether *ortok+lugu* in M I 12,10 (translated as 'teilhabend' in Zieme 1969: 120) is an instance of this suffix is not certain: The context *ol ädgü mäŋikä ortoklugu bolayan* 'May I participate in that good happiness' makes it possible that this is a variant of the suffix *+lXg*. Scholars like Ramstedt and Poppe linked Mongolian *+lUgA* to the Turkic formative *+lXg*, which is possible as well. But then, it cannot be excluded either that *+lXg* and *+lXgU* have a common origin, their meanings not being all too different: A split could possibly have taken place through the

[311] The brackets indicate the scope of the suffix.

[312] She does not list the form among the case forms, because she takes the forms with *+n* to be instrumentals from *+lXg*. She also mentions an alternant '*+lïγï*' (which she may have thought to contain the possessive suffix) not known to exist.

specialization of *+lXg* in word formation. If this is indeed so, then *ortoklugu* in M I could be the missing link between them.

An orientational formative *+dXn* appears e.g. in *üstün köktä altïn yagïzda* (MaitrH XX 1r5) 'in the blue (sky) on high and on the brown (earth) below'. It should be distinguished from the ablative case ending, although the distinction can be difficult to make in practice: They look identical when added to unrounded stems. *+dXn* is added only to the pure stem (i.e. never after plural and possessive suffixes) and is itself capable of bearing these two suffix classes; e.g. *öŋdüni* 'its eastern side' (Tariat W5) or *sugčew taštïnïnta* 'outside Suchou' (ManBuchFrag II 2v5) with possessive suffix.[313] In *ičtinsiz* (TT VIII A 4) it precedes a formative. It is therefore not a case suffix in the strict sense. One reason for mentioning it here (and not among the formatives of section 3.111) is semantic; another one is that it is often difficult to tell apart from the ablative. Appearing in all Old Turkic texts, *+dXn* is in Uygur applied to a limited number of deictic nouns such as 'north', 'east', 'inside', 'left' or 'behind'. It has fourfold vowel alternation in all runiform sources and in Manichaean texts, except the late Pothi book, which writes *koptïn* 'everywhere'. PañcFrag 192 also has *+dXn* in pronominal *kanyudun* 'in which direction', which is clearly archaic also as /ñ/ is still unchanged here.[314] In Buddhist Uygur this suffix can appear as *+dIn* even in early texts, making it identical with the ablative in shape; e.g. *yaguk+tïn+kï kop kamag tïnlïglar* 'all creatures which are near' (MaitrH XV 2v6), *kün togsukdïnkï* (MaitrH XV 1r2) or *törtdin yïŋak* (MaitrH XX 1r11, 17, Pfahl III 9 etc.) 'in all 4 directions'. Cf. on the other hand *öŋdün küntün buluŋda* TT I 142) 'in the south-east (or 'in the east and in the south') or *kïra suvdun yerlärim* (SUK Sa12,3) 'my land, both fallow and *beside* water'.

Some opaque *+dXn* forms were metanalysed in later varieties of Turkic. Such is *üstün* 'above' < **üz* related to (or coming from) *üzä* 'above', wrongly given a stem *"üst"* in the EDPT; it is still spelled as *üztün* in the early Manichæan hymn edited in *UAJb N.F.* 16: 221-2

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[313] Cf. also *öŋdünindä* 'in its east' in SUK Sa9,2 and Mi20,6. The glossary to this work appears to consider *kündün+i* / *kündin+i* and *öŋdün+i* attested there in Sa10, 13 and 16 to be abbreviations of *kündün* / *öŋdün yïŋak* 'its southern / eastern side'. There is no need to make this assumption, although the two types of expressions can clearly alternate: Possessive suffixes are often used relationally.

[314] We spell the word with *ny* and not *ñ* as we reserve the use of *ñ* to the runiform and Indic scripts, which have such a letter.

(l.10).[315] Qarakhanid *astïn* 'beneath' is related to *asra* and wrongly given a stem *"ast"* in the EDPT and *altïn* 'lower' *al* < 'place beneath' (attested in M III 37,4_2), wrongly given a stem *"alt"* in the EDPT.[316] *orton*, e.g. in *iki orton ärŋäk* < 'the two middle fingers' (TT V 8,55) or *orton änätkäk elindä* 'in the realm of central India' (Ht VII 1791 & 1891) comes by haplology from *orto+dun*, attested in M III 10,12-13_1 (an early text); the meaning makes it highly unlikely that it should be an instrumental form. Cf. also *orton+kï* (e.g. Suv 134,1-2, BT VIII A 377 and 382, Maue 1996 24 nr. 9) 'the one in the middle'; *+kI* is not added to the instrumental. Some of the *+dXn* nominals have *+dXrtI* forms (cf. section 3.31) related to them, which have ablative meaning.

To sum all this up, Old Turkic nominals had the following 11 active and productive case suffixes: nominative, genitive, accusative, dative, locative, ablative, instrumental, equative, directive (fully productive only in runiform and Manichæan Old Turkic), partitive-locative and similative. The comitative, a 12th case, is neither active nor productive and absent from pronoun paradigms. The demonstrative pronouns also lack the partitive-locative; the personal and the interrogative pronouns both this and the instrumental. The interrogatives further lack the similative and the personal pronouns fuse the equative with the similative. The demonstratives thus have 10 case forms, the other pronouns 8; this is different from Indo-European languages, where pronouns generally have more cases than nouns. The appearance of pronouns in the directive case is limited to early texts, as with nouns.

3.125. Possesssion + case

Examples for case suffixes getting added onto possessive suffixes are *köŋl+üŋ+čä* 'according to your wish' (Tuñ 32), *sözinlüg(ü)n* (Xw 2) 'with their words' and *oglan+ïŋïz+da* 'among your (pl.) children' (KT SE). In the Sudži inscription (l.9) we have the stretch wg^{1}l^{1}n^{1}m:r^{2}d^{2}Amr^{1}mn^čA:b^{1}wl^1:, no doubt correctly understood as *oglanïm, ärdä mar+ïmïn+ča bol* 'My sons, be among men like (or 'in

[315] An etymology for *üzä* is proposed earlier in this section in connection with the suffix *+rA*.

[316] Clauson received this view from Gabain 1950a, who took '*alt, art, ast*' etc. and even *köt* 'buttocks' to be instances of a (nonexistent) "-*t*-Kasus". Cf. also *aldïrtï* and *alčak*. The UW (entries *al* III (?) and *al(a)ŋ*) does not trust the reading *kum alïŋa [i]lin-* in M III, which is said to be "zerstört", and would like to assign the word to the lexeme *alaŋ*. However, the present loss of the word's fourth character may not have taken place when Le Coq read it (as he does not mark it), and one would rather expect *kumlug alaŋ* if the word were not to have a possessive suffix.

accordance with the precepts of'[317]) my teacher!'. If this interpretation is correct, the equative suffix was here added to the accusative form of the possessive suffix, as happens with pronouns.

In the nominative, the final /n/ of the 3rd person possessive suffix is subtracted (as in the nominative of the demonstrative pronoun *bo/bun+* and, in Orkhon Turkic, the collective suffix *+(A)gUn*).

The same appears to happen in the instrumental, e.g. in *anta ötrö oguz kop+ï+n kälti* (Tuñ 16) 'thereupon the Oguz all came': Thus upon the assumption that this inscription, like other early texts, has the *+(X)n* and not the *+(I)n* variant of the instrumental suffix.[318] *kün t(ä)ŋri ... k(ä)ntü y(a)r'ok'ïn k(a)magka y(a)r'otïr* (M III 7 I r 9) 'The sun shines on everything with its own light', could also have the possessive followed by the instrumental suffix, but *yarokïn* could, in this context, just as well be an accusative form. Also in *yarlïkančučï köŋlin ... yarlïkayur* 'he decrees with his compassionate mind' (Maitr 26A r8), assuming that this is to be analysed as *köŋl+i+n*. Gabain 1974: 98 mentions '*ködügin*' (she means *küdüg+i+n*) as an example for the possessive-instrumental sequence. In *muntakï yörügčä bïšrunsar yorïsarlar adaklarïn irklämätin ärdinilig vajïr tagka axdïngalï uyur* (BT I A_2 16) 'If they live by this doctrine, they will be able to climb the jewel-*vajra* mountain without treading (on it) with their feet' one might want to assume the presence of a possessive suffix after *+lar* but this is not certain. The instances in *pr(a)tikabut körkin kurtulgu tïnlïglar ärsär* (U II 17,28) 'If they are creatures to be saved through the appearance of a *pratyeka-buddha*, ...' and *kunčuylarnïŋ isiz yavaz sakïnčïn ... braxmadate eligkä yalganturur ärdi* (U III 54,11) 'with women's bad and vile thoughts' can only be instrumentals. In the Manichæan (and presumably early) fragment U 139 r3 edited in the note to BT V 175, on the other hand, we find the instrumental ending added to the full form of the possessive suffix: *yaro]k täŋri kučinin etmiš [ö]rgin üzä olortï*

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[317] This is the editor's proposal. The Aramaic word *mar* 'master' appears also in l.7 of the same inscription, where it can hardly be understood in any other way. The term was in Central Asia used both by Nestorians and Manichæans, and the royal Uygur dynasty of (present-day) Mongolia had adopted Manichæism. *Buyla Kutlug Yargan*, who speaks in the 1st person in this epitaph, says that his father was a Kïrghiz. He may have served the Uygur Yaglakïr dynasty or he may have been Manichæan although he was Kirghiz.

[318] We understand the front N in the spelling ^{w}kpn^{2} to indicate the presence of the 3rd person singular possessive suffix. This n^{2} may, however, also be a simple error (of which this inscription is not free) for n^{1}, in which case the word would simply be *kop+un*.

'He sat on the throne which the Light God had created with his might'.[319]

With the genitive marking, the /n/ is a simple one also in that variety of Old Turkic which keeps the initial /n/ of this suffix after consonants: The shape of the sequence is *+(s)InIŋ*, never '*+(s)InnIŋ*'. Before the equative, the locative-ablative, the ablative and the comitative case endings (and, in early sources, also before postpositions) the 3rd person singular possessive suffix appears as *+(s)In* and not *+(s)I;* e.g. in *täŋrilär söz+in+lüg(ü)n* (Xuast 2) 'with the word of the gods'.

In the dative form, the 3rd person possessive suffix also has the shape *+(s)In.* In Orkhon Turkic we appear to get fusion of *+(X)ŋ* and *+(s)In+* with **+gA*; as a result, the 2nd and 3rd person possessive morphemes with dative ending give *+(X)ŋA* and *+(s)IŋA* respectively.[320] With nouns this *+gA* is rare before Middle and Modern Turkic, as documented above. In Uygur the 3rd person possessive appears as *+(X)ŋA* in the dative, e.g. *tutmïšlarïŋa* (MaitrH XI 4v10) or *katïglanmakïŋa* (U IV A 265).[321] After the Orkhon Turkic 1st person possessive suffix, the dative suffix is *+A*: We get *+(X)mA* (e.g. *kagan+ïm+a*), presumably in analogy with the 2nd person singular. Quite a number such forms are listed in T.Tekin 1968: 131; they were also in use in the Xoitu Tamir graffiti and in the inscriptions of the Uygur steppe empire (*ogluma* in ŠU E7, *ävimä* S6, *yašïma* N4). Regular (analogically restored or archaic) *+(X)mkA* forms are, however, found in BQ E15 (*yaš+ïm+ka*), e.g. in U III 37,2 (*bolmïšïmka*), DKPAMPb 906 or 989 (both *išimkä*), and, beside *+(X)mA*, a number of times in Yenisey inscriptions: In E147, e.g., we find, on the one hand, *elimkä* 'my country', *oglumka* 'my sons' and *atïmka* 'my horse', on the other hand *kunčuyuma* 'my wife', *ulugum kičigimä* 'my big and small ones' and *bodunuma bokunuma* 'my tribe and nation', all governed by *bükmädim* 'I have not had enough of'. In *kuydakï kunčuyumga adrïldïm* 'I parted from my wife at home' in E6,4 the dative form has the intermediate shape with g^1; in *kunčuyumgaka* in E7,4 the scribe probably first wrote g^1A, then 'corrected' to k^1A.

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[319] I would not be so sure as the editor was that this is an error, but it does admittedly seem to be isolated.

[320] *öz+i+kä* in line a 6 of the military ms. among the Thomsen-Stein documents is unclear; note also that the runiform characters for k^2 and ŋ are often quite similar.

[321] In the Uygur and Arabic scripts ŋ is spelled as NK, in the Manichæan script as NG; in front-harmony words in these script one cannot therefore actually 'see' the fusion. It is however evident in the runiform and Indic scripts, which have special characters for this sound, as well as in back-harmony words in the Semitic scripts.

The directive shows the same process, with *+(X)mArU* in the 1st person sg., (e.g. runiform *äv+imärü*),[322] *+(I)ŋArU* in the 2nd, *+(s)IŋArU* (e.g. *barmiš+ïŋaru* in DreiPrinz 17) in the 3rd. Remember that this is limited to a morphological process not applying to regular juncture; there are many instances such as $k^1g^1n^1g^1r^1w$ (= *xagan+garu*, Tuñ 20), where /n/ and /g/ do not fuse when they are adjacent to each other.

The linking of the possesive and accusative suffixes normally gives *+(X)mIn, +(X)ŋIn* and *+(s)In* respectively in the 1st, 2nd and 3rd persons singular: *+(X)mIn* appears in some Yenisey inscriptions and in Uygur, including such runiform mss. such as the IrqB; e.g. *nom+um+ïn išid-* 'to listen to my teaching' (MaitrH XV 2v1), *ötügümin bütür-* 'to carry out my request' (Ht V 311) or *ögümin köŋülümin* (TT X 462) 'my mind and heart'; *+(X)ŋIn* e.g. in *kul+uŋ+ïn* (Yosıpas 10) 'your slave (acc.)' or *ät'özüŋin ïdalap* (Suv 566,13) 'sacrifice your body'. These forms predominate also in Manichæan sources, as listed in Zieme 1969: 106-107. In some early texts, however, the last syllable of the affix combinations had /X/ in the 1st and 2nd persons: *kizläncü+ŋ+ün* (M III nr. 6 I r7) and *kältökümün kertgünzün* (DreiPrinz 65) appear in very early texts and Gabain 1974: 98 mentions *törö+ŋ+ün*.

In the runiform inscriptions there is often no explicit vowel in the last syllable, so that 'fourfold' harmony is likely:[323] In BQ N 11 we should presumably read *bodun(u)m(u)n terü* ... 'organising my tribe', in both ŠU E9[324] and Tariat W2 *b(i)t(i)g(i)m(i)n b(ä)lgüm(ü)n ... yassï taška yaratdïm / yaratïtdïm* 'I affixed my writing and my mark onto a flat stone'; cf. also *töröm(ü)n* in Tariat W3 and *suv(u)m(u)n* in Tariat W4. Forms from unrounded stems as in *'amtï sän ... išiŋin išlägil' tep tedi* (Suv 600,22) 'He said 'Now carry out your job' are not relevant for establishing the vowel of the accusative suffix since both /I/ and /X/ would give /i/ or /ï/. In the Orkhon inscriptions there is a single instance of n^2 after unrounded vowel in back-harmonic context, and in Sudži l.6, a relatively late runiform inscription from the period after the Uygur kaganate, $wg^1l^1mn^2$, presumably to be read as *ogl+um+in*.[325]

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[322] The /ä/ of the suffix is not explicit. Apparently because of this form and some others, Gabain 1974 §§187, 394 and 429 (as well as some other scholars) thought that Old Turkic had a case suffix of the shape *'+rU'*; the matter is mentioned where I discuss the directive suffix in section 3.124.

[323] The absence of an explicit vowel in one of the Semitic scripts (as often happens in Manichæan texts) cannot, however, be interpreted in any such direction.

[324] In his transliteration / transcription Ramstedt writes $b^{\ddot{a}}lgümin$, which means that there is an explicit I, but in his reproduction of the runiform text there is no such letter.

[325] '*yoguŋ koragïŋnï*' 'your funeral (acc.)' in Ongin r4 (cf. T.Tekin 1968: 130 and Doerfer 1993: 149, where much of the documentation is brought together) is a

In the 3rd person accusative the suffix is practically never rounded; *körkün*, used in this function in U II 17,29 and 31 (Kuan), might therefore be considered errors (*körkin* being used with this meaning even more often in the same passage).

The accusative of the plural possessive forms in the earliest Uygur texts has the same shape *+Xn* as in the singular, e.g. *körk'üŋüzün ... yüz'üŋüzän* 'your face' in M I 10,7-9, *isäŋäz(i)n* 'your task' 10,13, *öz'üŋüzün* 'your self' 11,17, *ämgäk(ä)mäz'in* 'our suffering' 11,18, all in the same text, *yerimiz(i)n … özümüzün üzütümüzün* 'our place', 'our self and soul' in M III nr. 1 IV r 9-11 or *bägädmäkäŋiz(i)n* and *ärklänmäkiŋiz(i)n* in DreiPrinz 66-67 (which is also Manichæan). In Buddhist texts we get *+nI*, as with the pronouns, already at a quite early stage, e.g. in the Sängim ms. of Maitr and in TT VI. This does not exclude *+Xn* instances beside *+nI*, as possibly in Ht III 454. Examples for this and for forms expanded with the plural suffix as *ogulanïŋïzlarnï* can be found in Doerfer 1993: 150.

Possessive suffix and comitative case appear in *täŋrilär söz+in+lügün* (Xw 2) 'with the word of the gods' and *iki kutlug el[ig]lär kamag tegitlärin kunčuyl[arï]n tözünlärïnlugun* (DreiPrinz 119) 'the two blessed kings together with all their princes, wives and retinue'. This last example from a quite early text is remarkable: The three nouns share the case suffix as they would share a postposition. The comitative suffix can't have come from a postposition (as has been suggested for some of the case suffixes) because it starts with an /l/, which never appears at the beginning of words. It does suggest, however, that the case system originally was a two-tier one, as is proposed below in section 3.131 in connection with the oblique cases of the personal pronouns: The accusative of the possessive form appears originally to have been identical with the oblique base.

3.126. The converter *+kI*

The suffix *+kI* has an Orkhon Turkic variant *+gI* in *tabgač+gï bäglär* in KT E7, BQ E7:[326] *+kI* itself happens in Orkhon Turkic to be attested only after vowels, with either the locative suffix (e.g. *balïkdakï* 'the one

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misreading, as shown by the unpublished documentation of Thomsen and Wulff: There is no I at the end and the form is to be read as *koragïŋïn*.

[326] Tekin 1968's reading '*čöl+gi*' in Tuñ 23 (upheld in 2003: 83 with the translation 'bozkırdaki') is problematical for reasons given in EDPT 420. The context of *yagï bod(u)nkï k(a)g(a)ngï* in Taryat W5 is not clear; possibly, *+kI* or its variant *+gI* could originally also be added to nominatives with the meaning 'the one belonging to'..

in the town') or the directive-locative suffix *+rA* / *+yA* (e.g. *öŋräki* 'the previous one') or *bärü* 'hither'.[327]

In Uygur *+kI* converts adverbial phrases, mostly expressing place or time, into attributes; it thus functions like a relativising conjunction. In *täŋri yerintäki tokuzunč kay* 'the ninth stratum in the land of the gods' or *tört yïŋakdakï eliglär* 'the kings in the four regions of the earth' (U II 23,20) it is added to noun phrases in the locative. However, we also find *tört yïŋakkï burxan[lar]* (Suv 25,9) 'Buddhas in the four directions' and *kedin yïŋakkï sukavati atlïg yertinčü* (Suv 46,20) 'the world called Sukhāvatī, which is in the east' where the same phrase as in the previous example lacks the locative suffix. The reason for this double behaviour is that *yïŋak* is both a noun and a postposition (see section 4.21). In *kamagda üstünki arxantlar* (MaitrH Y 502) 'the highest *arhats*' and *soltïnkï oŋtïnkï* 'which are on the left and/or on the right' we find it with forms in the orientational formative *+dXn*. *kün tugsukdunkï kapïg* (MaitrHami 15 1 a 2) 'the eastern gate' and *kün tugsukdunkï yel* (M III 9,1$_2$) 'the eastern wind' show phrases with this same formative, while in *kurïyakï yïryakï öŋräki bodun* (Tuñ 17) 'the western, northern and eastern nations' the bases of *+kI* are variants of the directive-locative case suffix *+rA*. *ot(ï)rakï* 'the one in the middle' (Abhi A 109a9 and elsewhere) comes from *orto* 'middle' without a locative suffix. The absence of a local suffix or a postposition before *+kI* is characteristic of temporal expressions (see below); the late form *ot(ï)ra* (<< *orto*) may possibly have been felt to contain the suffix *+rA*. The ablative also appears as base, in *kišilärdinki toz* (Ht III 897) 'the dust coming from the (arriving) persons' or *yultuztïnkï, tokuz ešiktinki, tadu maxabut bulganmakïntïnkï, darmaxariki täŋrilär burčïnmakïntïnkï turmïš [ada]lar* 'dangers emanating from stars, from the nine threshholds, from confusion of the elements (or) from the vexation of the dharmāhāraka gods' (Mängi 11-12).

suv üzäki (MaitrH XX 1r2) '(ships) which are on water' and *taštïn sïŋarkï ... ičtin sïŋarkï* (MaitrH XI 3r29-30) 'external ... internal' show the element added to postpositional phrases. There are a number of examples for *ara+kï* discussed in the UW entry for it; one instance with slightly aberrant meaning is *tört yegirmi [kolti sanï] yalŋuklar arakï yï[llar] ärtsär* (MaitrH XXV 4v4) 'when 14 *koṭis* of years (in use) among humans pass'. All the mentioned phrases were local. *šariputr birläki arxant toyunlar* (thus!; SP 36) 'the *arhat* monks who (were)

[327] The reading of b^2 in *anta bärüki ašok bašlïg sogdak bodun* (Tuñ 46) 'the Sogdian population led by Ašok which is on the hither side (of those mentioned before)' is not certain but is likely in view of the context.

together with Śāriputra', however, is not; further examples of *birläki* appear in Abhi. In the following involved instance, *+kI* is added to what is a static local expression in the context, although this does not follow from the morphology of the form *kuvraglarka tägikilär*: *täŋridäki yerdäki kök kalïk yüzintäkilär, ... beš yïŋaklardakï luo xanlarï, täŋrilig luolug säkiz bölök kuvraglarka tägikilär üčün* (BT II 1354) '(We deflect our *puŋya*) for the benefit of those who are in the sky and on earth and on the face of heavens, for ..., for the dragon kings in the four directions, up to (i.e. including) the ones among the deities and dragons who are in the eight classes of crowds'. The locative of **kuvrag+lar+ta* is deleted through the addition of the dative suffix (since there is no case recursivity with nouns) demanded by *tägi*: The locative must be understood as if it were there, as this is one element (which happens to be the last one) in a list of types of creatures located in various places.

In general, it is the *+dA* form without *+kI* which appears in existential expressions with *bar*; in the following instance, however, we find *+dAkI*: *yertinčüdäki näčä ulug yaŋï künlär bar* ... (ms. T III MQ 62 = U 5088 quoted in the note to BT V 438) 'Whatever there are of great New Days in this world, ...'.

Added to temporal expressions we have e.g. *baštïnkï* 'the one in the beginning' (BT II 57), *kenki* 'the later one' (BT II 117), *kïškï* 'winterly', *aykï* 'monthly (i.e. applying to a month; examples in the UW entry)', *bir künki* 'pertaining to one day' (Maitr 73v27). In *öŋrädin bärüki* 'the one which exists since an earlier time' (BT II 178) and *ilkisizdin bärüki* 'which exist from the beginning of all time (lit. from when there was nothing previous)' the suffix is added to a temporal postpositional phrase. *bo küntä öŋdünki ... berim* 'debts from before this day' (SUK Mi5,5) also has a noun phrase as base. In *ärtmiš üdki* 'the past one (lit. the one pertaining to past time)' and *ken käligmä üdki* 'the future one (lit. the one pertaining to time to come later)' (BT II 72 and 141 respectively) the suffix is added to heads with attributive participles. *söki* (cf. adverbial *sö+n*), *oza+kï* and *ašnu+kï* all signify 'previous', the third e.g. in *ašnu+kï tabgač+da+kï oguz türk* (ŠU S9) 'the Oguz (and??) Turks who were previously in China'[328]. *kïškï, aykï, künki* etc. are presumably possible only because nouns denoting stretches of time can be used adverbally also in the nominative.

[328] Examples for *ašnukï* can be found in the entry of the UW, which also gives a few examples for adnominal *ašnu*. I have here translated adnominal *ašnukï* with the adverb 'previously', because the Turkic construction has no verb whereas the synonymous English one does.

In Abhi there are a number of examples in which *+kI* is added to a clause in *ärkän*: *tugum košulu turur ärkänki üdtä* (270) or *bodisatv ärkänki üdtä* (2158) 'at a time when (Buddha) was (still) a *bodhisattva*'. The form *täg-mäz+kän+ki* is especially common, e.g. in Abhi B 1620: *sorïnčan taš näčä usar ymä kapgalï tägmäzkänki tämürüg* 'as a magnetic stone is able to catch a (piece of) iron which it was not in contact with'. This text being so creative about *+kI* we also find *uzatï+kï* 'what has existed for a long time' in Abhi A 1051, coming from a petrified converb.

In *yašurukï iši üzä kapïgïŋ üŋürsär* (TT I 217) 'if somebody bores a hole in your door because of a secret matter', the base is a converb which is neither local nor temporal, if interpreted correctly. The DLT has *yašru iš*, so that we know that, at least in Qarakhanid, *yašru* could also be used adnominally without *+kI*. The need for *+kI* may, in this case, have been the bracketing: It might have been needed to show that *yašuru* was not qualifying the verb or the whole rest of the clause but just *iš*.

+kI forms can lose their head, i.e. get recycled: They can then be pluralised, as in *taštïn sïŋardïnkïlar* (Ht VIII 189) 'those who are on the outside' or *uluš+ta+kï+lar* 'the ones in the realm'; above we quoted another such instance from BT II 1354.

Headless *+kI* forms also get case suffixes, e.g. *öŋ+tün+ki+g* 'the easternly one (acc.)' (Maue 1996 nr. 21/34), *kalïk+ta+kï+nï* (U II 69,4$_2$, with the late or pronominal accusative suffix), *kamag yer üzä+ki+niŋ kutï kïvï* (Xw 77-8) 'the blessing of everything on earth'; *törö bitig+dä+ki+čä* (Suv 547,48) 'as in the book on ethics', *bökünkičä uzun* (BT V 148) 'long as on this day' or *tirigdäkičä* (KT SE) 'as when one is alive'. *odug+um+da+kï+da yegräk* (Suv 125,13) is 'better than in my waking state': The first *+dA* is local while the second is governed by *yegräk* 'better'.

With both plural and case suffix: *ävdäkilärtin ençlik äsänlik ayïtu ïdur biz* (UigBrief C3) 'We are sending (this), inquiring (whether) those at home are well and happy'; *öŋräkilärniŋdä* 'than that of the previous ones' is in Ht VII 199-200 opposed to *amtïkïlarnïŋda* 'than that of the present ones'.

+kI forms can be governed by postpositions, e.g. *yugant üdtäki täg* (MaitrH XX 1r12) 'as in the *yugānta* age'. *öŋräki täg* is in BT XIII 8,10-12 mistakenly translated as "wie das Vorige"; in fact it signifies 'as before': Unlike Germanic or Romance languages, Old Turkic postpositions are unable to govern adverbs and therefore need them nominalised; cf. Turkish *önceki gibi* 'as before'.

In BT III 543-545 the possessive suffix (in the accusative case) appears after *+kI*: *"bar ärsär mäniŋ azkya ärsär ymä münüm kadagïm, ... eriŋlär münäŋlär" tep, "ätöz+dä+ki+m+in ärsär ymä, tül+ta+kï+m+ïn ärsär ymä, köŋül+dä+ki+m+in ärsär ymä"* 'He said "If I have even a bit of sins, ... criticise and chastise them, be they my (sins) of body, of tongue or of heart." *köŋül+dä+ki+m+in* means 'the ones I have which are in the heart'; *köŋül+üm+dä+ki+ni* would have signified 'the ones which are in the my heart'.

ičräki 'inner', which is in form similar to *öŋräki, tägräki* (e.g. U II 22 v 2) and *asrakï*, is found in adnominal use among other places in KT S2 = BK N2, BK N14, M I 17,8 and Xw. *ičräki* 'the internal one' got lexicalised and was used as a title in a number of early Turkic languages, also in Eastern Europe. *ičräki+kä* (ThS I a 21) is an example for this title in nominal use. The earliest examples appear in the Yenisey inscriptions E4, E11,1 and, spelled with G, E37,1.

ilki 'first' is also formed with *+kI*. It is related to the directive form *ilgärü* 'forward; eastwards'; their base, a noun documented in Qarakhanid, is discussed in footn.572 below. *ilkidä* signifies 'before' as well as 'at first' (e.g. in MaitrH XX 14v13 and XXV 3v25), showing the meaning which *il+ki* must have had originally. Cf. also *ilkidäki* in MaitrH XX Endblatt r2, with recursive *+kI*. Starting with the DLT (though not in all modern Turkic languages) *ilki* was metanalysed into *ilk+* 3rd person possessive suffix.[329]

It happens that *+kI* phrases are adverbial, e.g. *ol künki biziŋ ašda ölürgüči ud koyn toŋuz bašlap tünlïglar* (Suv 6,13) 'creatures, mainly bovines, sheep and pork, which we slaughtered on that day at our meal'. The phenomenon should be recognized before the *+kI* is emended away, as done by Röhrborn for *ürdäbärüki tarïmïš tikmiš yeg tültaglar* (Ht VII 184), although this signifies 'the good causes planted at an early stage': This is clearly a case of attraction, but it clearly has some linguistic reality behind it.

3.13. Pronouns

These differ from other nominals in allowing double case suffixation with the demonstrative and interrogative pronouns[330] and in generally having only two of the four (or five, if one includes (in)definiteness)

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[329] Turkish uses it without the final vowel; this misled the EDPT into positing a base *ilk* for Old Turkic.

[330] Note that a case sequence *+nXŋ+dA* is possible also with nouns. *+čUlAyU*, which – rarely – gets added to nouns as well, probably consists of *+čA* and *+lAyU*.

nominal categories, number and case. Possessive suffixes, representing a third category, were in use only with the interrogative *kayu* 'which' with the meaning 'which of them'. We have also found two correlative instances of *kim+i* 'who among them'; the near-pronominal noun *öz* is regularly found with possessive suffixes. Some pronouns differ from nouns and adjectives also in showing vowel alternations (described below) and in having the pronominal *+n*+[331]. 1st and 2nd person personal pronouns differ in having a plural suffix *+(X)z* instead of *+lAr,* found also in the possessive suffixes of these persons (though *+lAr* can additionally be appended to the 2nd person plural pronoun).

Old Turkic has personal pronouns of the 1st and 2nd persons, *bän* and *sän*, at least two demonstrative pronouns *bo* 'this' and *ol* 'that', a reflexive pronoun *käntü* and three interrogative-indefinite pronouns, *käm* 'who' (nominative in the runiform inscriptions and mss., e.g. BlattRun 27; *kim* elsewhere), *nä* 'what' and **ka* 'which'. A few additional stems are also discussed in the next sections. All pronouns show the category of number and, recursively, the category of case; oblique demonstrative forms can be converted to attributive use by the element *+kI*.

bir ikintiškä 'each other, one another' is also, in fact, a pronoun, as it stands for noun phrases: It represents the participant group connected with cooperative-reciprocal verbs as the reflexive pronoun stands for reflexive verbs. Although this element looks as if it contains the dative suffix, it is in fact used also if two parties are each other's direct objects. *bir ikintikä* (e.g. DKPAMPb 527), showing the simple dative of the ordinal of 'two' is a rare alternant of this: It may possibly have been its source; cf. also *bir ikinti birlä* (Wettkampf 41-43).

The declension of pronouns differs to a smaller or greater extent from that of nouns. One feature which characterises the declension of all pronouns (though not of *öz*, which is a noun in other senses as well) and distinguishes them from nouns and adjectives is the accusative ending *+nI*. From the earliest texts, this ending is found also with a number of quantifiers of miscellaneous origin and collectives ending in *+(A)gU*, in accordance with their pro-nominal use. *alku* 'all', e.g., gets the *+nI* allomorph of the accusative suffix in TT II,1 16 and in a number of

[331] The stems of demonstrative pronouns and the 3rd person possessive suffix end in the consonant /n/, deleted in the nominative. The /n/ appears also when the 3rd person possessive suffix is followed by the antonymy and parallelism suffix *+lI*. With the personal pronouns an /n/ element appears in all the forms except in the nominative plural. In Orkhon Turkic the stem of the collective suffix *+(A)gU* is also expanded with an /n/ when possessive suffixes follow (cf. OTWF 97).

other examples mentioned in UW 101; cf. *kamïgu+nï* 'all (acc.)' (Pothi 61), *ikigü+ni* 'both (acc.)' (Ht IV 748, BT I A_2 33), *adïnagu+nï* 'other people' (U III 4,3_1) and *yumkï+nï* 'all of them (acc.)' (Pothi 101). In the course of the development of Old Turkic (cf. Erdal 1979) and towards modern Turkic languages, *+nI* then gradually gets applied to noun stems as well, in late Old Turkic mainly to stems ending in vowels and to foreign words.

3.131 Personal pronouns

The personal pronouns for speaker and addressee are the following:

	1st pers. sg.	1st pers. pl.	2nd pers. sg.	2nd pers. pl.
Nom.	bän / män	biz (bizlär)	sän	siz, sizlär
Gen.	bäniŋ/mäniŋ, miniŋ	biziŋ, bizniŋ	säniŋ	siziŋ, sizniŋ, sizlärniŋ
Dat.	baŋa / maŋa	biziŋä, bizkä	saŋa	siziŋä, sizlärkä
Acc.	bini / mini	bizni	sini	sizni, sizlärni
Loc.	mintä, mindä, minidä	bizintä/biznitä biznidä	sintä, sindä, sinidä	sizintä/siznidä, sizlärdä
Abl.	mintin, minidin	biznidin	sinidin	siznidin
Dir.	baŋaru / maŋaru	biziŋärü	saŋaru	siziŋärü
Simil.		bizinčüläyü	siničüläyü	

We here find a consistent alternation between high and low vowels, which we also have with the demonstrative pronouns and possibly with *käm* 'who': low front vowels in the nominative[332] and the genitive singular, low back vowels in the dative and the directive singular, high front vowels everywhere else. *mäntä* in a letter in HamTouHou 25,2 is aberrant.[333] I have no doubt that the vowel in *bini*, *mintä* etc., *sini*, *sintä* etc. is (pre)historically the same as that found in *biz* and *siz*. *bini* and *sini*, both spelled with twice I, are attested already in Tuñ 10. I have met *miniŋ* only in ms. M 657 v3 (quoted in n. to BT V 521; WilkKatMan nr. 143) and KP 80,2 and *minig* in HamTouHou 18 (a letter sent from

[332] Note, though, that the nominative singular personal pronouns are usually spelled without any vowel, as *mn* and *sn* respectively.

[333] It would have fitted well with the theory of Doerfer 1993: 26, who reads the accusative form as *meni* and not *mini*; he says that the fronting is the result of backward raising of the vowels by assimilation (see that in section 2l401) and would presumably take *mintä* to have followed by analogy. However, such raising comes up only after the inscriptions.

Khotan) l.2; in KP 6,4 *mini* is spelled as MNY, but the same text has MYNY in four other instances.[334] Further we find *barmagay sïn* (KP 19,3) 'You will not go' and *igdäyü "täŋriči min nomčï mïn" tegmäkä artïzïp* ... 'getting foiled by one who falsely says "I am a man of God; I am a preacher"' in the ms. written in Manichæan script of Xw 121; the latter pronouns clearly seem to be intended to be understood as clitic, as they are written close to the words they follow.[335] Their shapes are similar to Turkish *sIn* 'you' and Khakas *BIn* 'I', which are both used clitically, follow synharmonism and show high vowels. The nominative of this pronoun is, in fact, normally written without any vowel in Uygur script, which makes it impossible to say how it was pronounced in the texts written in that script. Possibly, this defective spelling reflects just the variability posited here, though one instance for it is a rather narrow base for such an hypothesis.[336] See also n.737 in Zieme 1969, where scholarly sources are quoted for *min* in Middle and Modern Turkic languages. These few variants with *i* could be the result of analogy from those forms of this pronoun which do have it: This is what happened in those modern Turkic languages where nominative demonstrative *bo* was replaced by *bu*. In Brāhmī texts we have, e.g. *kïlmas sän* (TT VIII D32) or *barmagay sizlär* (TT VIII E49), which show that these pronouns did not follow synharmonism. According to Alyılmaz 2000: 111, who inspected the stone of Tuñ in 1997, 1998 and 1999, Tuñ 57 does not have *'büntägi'* but *bintägi bar ärsär* '(if a sovereign nation anywhere) had someone like me, (what trouble could it encounter?)' with explicit I in the first syllable.[337] *bintäg* (with possessive suffix

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[334] *män+ig* in BT I D78 is not the accusative of the pronoun but of a noun denoting the self, i.e. 'the ego'.

[335] In the other ms., written in Uygur writing, both instances are spelled in the normal form, as *mn*, without any explicit vowel. Hamilton transcribes the pronoun in KP 19,3 as *'sen'* but there is no justification for a change *sän* > *'sen'*; *mIn* and *sIn* could come from analogy with the accusative, locative, ablative and similative forms.

[336] The note a reader who says he came from China added with a brush to the Manichæan ms. edited in M I 23-29 has the phrase *yazukta k(ä)čirmin* 'I am overcoming sin' and even *min* 'I' starting a sentence. These instances cannot be taken as evidence for Manichæan Uygur as the person also has an imperative with *s* instead of *z*, *y(a)rl(ï)k(a)sunlar* (and uses the ablative with *+tIn* and not *+tAn*). What is noteworthy concerning the two instances in the Xw ms. and *k(ä)čirmin* is that in all three cases the syllable preceding the pronoun with a high vowel shows /č/: This consonant may be responsible for the high vowels, as well as for the irregular vowel of the aorist suffix, which should be *-är*.

[337] Tekin 1968 translated *'büntägi'* as "such a man", assuming backward fronting assimilation, but such assimilation is nowhere attested either with *täg* or in any other way; in *antag* < *an+ täg* and *montag* < *mon+ täg* there is forward assimilation, the

referring to a nation), is similar to *montag* 'like this', *antag* 'like that' and *sizintäg* 'like you' (ChristManManus, Manichæan fragment r10) in being constructed on the oblique base; had the base been the (syncopated) accusative form, the latter would have had to be *'siznitäg'* (since the accusative of *siz* is *sizni* though the locative is *sizintä* and the dative *siziŋä*). Had *montag* (of which we have at least 11 Brāhmī examples) been derived from the accusative *munï*, its vowel would have been /u/ and not /o/.

The change to back vowels in the singular dative and the directive, not found in any other paradigm, may be secondarily due to the influence of the velar element in the case suffixes; the idea of Doerfer 1977 that these forms came from the agglutination of a dative element *qa* seems groundless. The only place where the dative of *sän* is found in the runiform inscriptions is in Tuñ 32, and it is there spelled with s^2.[338] *baŋa* and *baŋaru* (both Tuñ) are both written with b^1.[339] *säŋä* and *saŋa* would be indistinguishable in the Semitic scripts used by the Uygurs. The only instance of the dative of *sän* in an Uygur text written in an Indic writing system is in Maue 1996 20 nr. 22, a source centuries later than the Orkhon inscriptions; there the word is spelled as *saŋa*. Directive forms of *sän* and *bän* appear not to be attested in Indic writing systems. Although the Tuñ instance is isolated, one could have taken it as good evidence since the text may be the oldest extant Turkic source we have. However, we find that this same inscription occasionally uses s^2 also in words absolutely known to belong to back harmony such as *bolsar, savïn, savïg* and *sakïntïm*, the other consonants in these words being spelled with the back harmony letters. The s^2 of the dative of the 2nd person singular pronoun in this inscription is there of no significance in view of the absence of other evidence for a front pronunciation.

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normal process for Turkic. Aalto writes "Taugenichtse (?)", which does not fit any known Old Turkic lexeme.

[338] The other letters in the word, Ɒ and A, do not distinguish between back and front harmony in the runiform inscriptions from Mongolia.

[339] Gabain 1974: 91 refers to a place in Radloff's edition of the Yenisey inscriptions for a putative instance of *bäŋä*. This is E9,3, for which Orkun instead (referring to the Finnish Atlas) proposes the reading *bäŋüsü yok ärmiš*; he is followed by Vasiliev in his atlas. Kurt Vulff's unpublished materials have *bäŋüsi yok ärmiš*. The inscription is dealt with by Kormušin 1997. mAŋA of the other runiform inscriptions gives no information on this matter, as the character inventory for those inscriptions has the same character for *m* and *ŋ* in back and front contexts; *maŋaru* in HamTouHou 26,10 in Uygur writing could have been read with front vowels as well (as in fact done by the editor). Cf. further *maŋaru* / *mäŋärü kälip* in Vimala 494.

The QB has six examples of a dative form *saŋar* 'to you' beside *saŋa*, which presumably resulted from analogy with the demonstrative pronouns (which serve for the 3rd person); the recourse to five of these appears to have been metre or rhyme related.

A characteristic of the personal pronouns is the plural morpheme *+(X)z* (found also in the possessive suffixes), but *+lAr* is also already present in all varieties of Uygur. There are a number of instances of *sizlär* beside *siz* but hardly any *bizlär* beside *biz*; the former form is found e.g. in U I 6,2 (Magier; *bulsar sizlär*) and 43,7, TT II,1 77 (*ötläsär sizlär*) or MaitrH XI 3r2. In oblique cases we have e.g. *sizlärni birlä* (U IV A 81), *sizlärdä* in ablative meaning in early *sizlärdä almïš agu* (M I 19,15) 'the poison taken from you (pl.)', *sizlärn(i)ŋ* in Yosıpas 11. I have met *bizlär* only in SUK Mi13,1, a collective receipt, and in a late Uygur inscription (PetInscr). The reason for the difference between the 1st and 2nd persons is that *siz* is mostly used for the polite singular, *sizlär* becoming necessary for referring to the 2nd person plural (polite or not).

The genitive of *biz* appears both as *biziŋ* and as *bizniŋ*: Orkhon Turkic, Manichæan texts, sources in Sogdian script (which have some pre-classical characteristics) all have *biziŋ*, as do Buddhist texts in general (e.g. in BT XIII 12E r4, TT IV A 24 and B 37 and 41); *bizniŋ* crops up here and there, however, mostly in late sources (e.g. TT VII) but also in Manichæan and early Xw 8 (one among three mss.; the other two missing). *sizniŋ* is even rarer than *bizniŋ*:[340] The Suv has 13 examples of *biziŋ* and 34 of *siziŋ* as against only one each of *bizniŋ* and *sizniŋ*; *siziŋ* also appears e.g. in DreiPrinz 66, TT II,1 17, 19, 23 and 49 or Pothi 95. The 'pronominal n' was clearly originally not part of these genitives; the longer forms must be related to the replacement of *+(n)Xŋ* by *+nXŋ* as genitive suffix.

Above we discussed the form *siz+lär*. In very late texts that can be replaced by *sänlär*, and we have *silär* and *silärniŋ* in HamTouHou 21,4 and *silärni* in KP 76,3 and 5. *silär* probably does not result from a phonetic dropping of /z/ but from the replacement of the pronominal plural marker *+(X)z* by the much more 'regular' *+lAr*.

bän, bini 'I; me' and *biz* 'we' share their *b°* with *bo*, the demonstrative of close deixis (presumably pointing at the domain of the speaker) and *bärü* 'hither; since', which signals movement towards the 'here and now' of the speaker. The *°n* would then be the 'pronominal *+n*' absent

[340] What is read as *sizn(ä)ng* in M I 10,11 and crops up as *sizn(i)ŋ* in Gabain 1974: 92 can just as well be read as *sizäŋ*, with the vowel lowering occasionally found in pre-classical sources.

in *biz* and *siz*, normally characteristic of oblique cases; I take it to have been introduced into *bän* by analogy.[341] This element does, however, reappear in the oblique forms of the plural personal pronouns, unlike the plural demonstratives.[342]

The ablative, the locative-ablative and the similative are partly constructed on an intercalatory element *+nI+* identical with the pronominal accusative ending; thus e.g. *sinidin* U III 48,11, *minidä* SUK Ad2,11, *sinidä* TT I 126 or U III 83,3, *biznidä* Suv 433,22 and 611,1 or U IV A 267. This element appears also before the suffixes *+lXg* and *+sXz*, which we have assigned to word formation: We have *biznilig erinč tïnl(ï)glar* (UigOn III B r3) 'us poor creatures' and, with the demonstrative to be dealt with straightway, *munïsïz* (ETŞ 12,47) 'without this'.[343] However, I assume *mintin* in *mintin adrïl-* in DKPAMPb 866, coming from the oblique base and not the accusative, to be the original form.[344]

The directive, dative and partly the locative-ablative and the similative of plural personal pronouns have *+Xn+* instead; e.g. *siziŋä* in M III nr. 6 I r 3, or TT II,1 73, *biz(i)ŋärü* in Xw 166 (all three mss.), *siziŋärü* twice in the fragment quoted in the note to BT V 175 and six times in M III nr. 9. *+Xn+* turns up also in the postpositional phrase *sizintäg* 'like you' (ChristManManus, Manichæan fragment r 10). We have *bizintä* in M I 33,20 and *sizintä* in M I 10,5; *biznidä* is quoted above and *siznidä* is the general form. One could, with Doerfer 1992 (and with Nauta 1969 quoted by him) speak of this °*n*° element as forming an oblique stem (in the manner of Tokharian or Romani, which have two-tier case systems). However, an alternation between *+n, +Xn*

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[341] The Proto-Turkic nominatives of 'I' and 'you' might have been **bä* and **sä*; the vowel of Bolgar-Chuvash **bi* and **si* apparently comes from a different analogy with the oblique stems.

[342] The dative was read as *bizkä* in Yenisey E36,2; however, according to Wulff's unpublished material the stone shows b^2Izk^2I (perhaps *biz äki* 'we two'). This inscription was not dealt with by Kormušin 1997. Two late instances of *bizkä* are mentioned below.

The form *s(i)zä* mentioned as dative in Gabain 1974: 92 and said to appear in Yenisey inscriptions is to be read as *äsiz-ä* 'oh, alas!', as pointed out by T. Tekin 1964. (The interjection *(y)a*, dealt with in section 3.4 below, appears to have followed vowel harmony in Yenisey Turkic though not in Uygur.) Besides, the Old Turkic dative suffix is not *+A* but *+kA*. Nor does a form *sizdä*, equally mentioned by Gabain on this page with the mark "(Yen)", appear in the indices of Orkun 1936-41 or Kormušin 1997 or in the DTS.

[343] Cf. also *mänsiz* in BT VIII B 124 and 151 and several times in BT I.

[344] *sintä* in Suv 680,11 is from Buyan Ävirmäk, a passage added to the text at a much later stage.

and *+nI* is found also in the accusative ending of the nominal possessive forms (discussed at the end of section 3.124); there it appears after the possessive suffix and can hardly have anything to do with an 'oblique stem'. The regular dative of *biz* is *biziŋä*; in two economical texts (SUK WP1,8 and Mi30,2) we find *bizkä* (both very clear on the facss.).

In Qarakhanid Turkic, postpositions which govern the nominative of nouns govern either the accusative of pronouns (as happens in other corpuses of Old Turkic) or their genitive (as e.g. in Turkish). We also find there that there is *säniŋdä* beside *sinidä, säniŋdin* beside *sinidin*, and even *säniŋsiz*; *anïŋda, anïŋdïn* and *anïŋsïz; biziŋdä* beside *bizdä; munïŋda* and *munïŋdïn* and so forth. The genitive as base for secondary cases comes into extensive use only in Qarakhanid and is by Ata 2002: 67 documented from Middle Turkic; it does however exist in late Uygur as well: There is *biziŋtä ulatï* in Abhi 1224, *biziŋtäkičä* Abhi 2297 and *biziŋčiläyü* several times in the Petersburg ms. of the Suv. Cf. the hapax *anïŋdïn ken* 'thereafter' in Suv 26,18.[345] There is no need for accusative or genitive content here (unlike case doubling among the demonstrative and interrogative pronouns). It therefore really looks as if the base of concrete cases is identical with the base for postpositions; whether this is a secondary phenomenon which came about through analogy or whether it comes from the time when some of these case endings were postpositions is hard to decide.

Additional locative forms are *sintädä* e.g. in *sintädä adïn* 'different from you' (U IV C87) and *sintädä öŋi* (TT X 466), *sintidä* in *sintidä öŋrä* 'before you' (Suv 626,5); the element *+dX+* presumably comes from the raising of *+dA* but I have no convincing explanation for why the locative-ablative suffix should appear doubly. *mindidä* has been read in U IV D86 and translated "von mir". However, this form looks identical and needs to be distinguished from *mïndïda* / *mïntïda* / *mïntada*, which is a variant of *muntada*, from *bo* (discussed in section 3.132). The translation '(from) here' cannot be quite excluded for U IV D86; in Maitr 187r11-12, however, the meaning seems to be rather certain: *kop kamag tïnlïglarag ... tuta tägintim. ančulayu ymä sän mintidä kamag tïnlïglarag urunčak tutgïl* 'Here, similarly, please acccept from me all the creatures in trust'.

mintirdin 'from me' (BT VIII B 49) and *sindirtin* (Suv 428,11) in *sindirtin bo nom ärdinig äšidtäčilär* 'those who hear this jewel of a *sūtra* from you' are built on an element *+dXr+* best attested with the demonstrative pronouns.

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[345] *mäniŋniŋ* in SUK Ad3,14 is *possibly* not an error for *mäniŋ*, as assumed by the editors, but related to the late use of the genitive as oblique base.

biziŋčiläyü in Suv 425,15, 431,14 and 434,4 is clearly a late form, reflecting the Middle Turkic replacement of the accusative form by the genitive before postpositions; the parallel Berlin fragment U 580 v16 (which is centuries older than the Petersburg ms.) instead of the instance in 425,15 writes *bizinčüläyü*, which is what we expect. Instead of *sizničiläyü* in Suv 497,13, the Berlin ms. U 752 r3 has *siničüläyü* (with *+čU+*), which must be the original form. All the similative forms mentioned above presumably come from *+čA+lAyU*; we find the similarly formed *ančulayu* and *munčulayu* among the demonstrative pronouns, but there we also have *anïlayu* and *munïlayu* based on the accusatives. Ottoman has *bencileyin* 'like me' and *bunculayïn* 'like this' and the Kača dialect of Khakas has *+džïlī* < *+džïlayu* etc. added to nouns. It is unclear how *+čU+* can be connected with *+čA*; an 'alternation' A / U would not make sense in the Old Turkic phonological context.

bolar ikigü mäniŋlär ol (U III 27,16) signifies 'these two are both mine'; it shows that the plural suffix can follow the genitive form of a personal pronoun for the sake of agreement with the topic.

No instrumental or equative forms of the personal pronouns appear to have turned up in Old Turkic; *sänin* and *mänčä* are, however, attested in Middle Turkic (Ata 2002: 67).

bän, bini, bäniŋ, baŋa and *baŋaru* are attested only in a part of the runiform inscriptions, all other Old Turkic sources showing *m°*. The Tuñokok inscription shows *män* instead of *bän* as subject pronoun following upon verb forms; e.g. *b(ä)n (a)nča t(e)r m(ä)n* (37) 'As for me, I say the following'. It has 17 instances of *bän* and 5 instances of *män* (all after *te-r*) used in this way. This is the only certain difference in Old Turkic between personal pronouns in independent and postverbal use; this does not yet foreshadow the personal pronouns' subsequent reduction to suffix status in the latter position. The doubtlessly later Tariat inscription, on the other hand, still writes *köčär bän* (W4). Doerfer 1994: 111 has dealt with the inscriptional evidence for this matter.

This postverbal use of pronouns appears to be obligatory with verb forms not having morphological person, as the aorist or the future forms. We sometimes find such pronouns also with verb forms with morphological person expression, as *biz* in the following: *küčümüz bir ikinti birlä sïnalïm biz* 'Let us compete with each other in strength' (Wettkampf 41-43).

3.132 Demonstratives

Old Turkic has two active demonstrative pronouns and paradigm fragments of a third one (mentioned below);[346] their forms are the following:[347]

	'this'	'these'	'that'	'those'
Nom.	bo	bolar	ol	olar
Gen.	munuŋ/ monuŋ	bolarnïŋ	anïŋ	olarnïŋ
Dat.	muŋar / muŋa	bolarka (QB)	aŋar / aŋa	olarka
Acc.	bunï / munï	bolarnï	anï	olarnï
Loc.	bunta / munta	bolarta	anta	olarta
Abl.	muntïn	bolardïn (QB)	antïn	olardïn(QB)
Instr.	munun		anïn	olaran
Equ.	bunča / munča		anča, anïča	
Dir.	(bärü)		aŋaru	olargaru
Simil.	munïlayu		anïlayu	

The singular oblique pronouns have the so-called pronominal *+n+* before the suffix.[348] There are, then, oblique stems *bun+* and *an+* differing from the nominative stems *bo* and *ol; bo* and *bun+* also differ in the vowel, alternating like the personal pronoun. The possessive suffixes of the 3rd person show the oblique pronominal /n/ as the demonstratives do.[349] In Uygur, the *b* becomes *m* when a nasal follows; this replacement did not yet take place in the inscriptions of the Uygur steppe empire, as shown e.g. in *bunda* in Tariat W 2. The /r/ in the

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[346] A demonstrative *šo* "dieser dort," which is by Gabain 1974: 94 (page top) said to turn up as *šunda* in the Yenisey inscriptions, does not exist. The author found this in Radloff's 'Glossar zu den Inschriften am Jenissei' (Radloff 1987: 373-4), which refers to E28 VII and E38 I. The first is to be read as *altun soŋa yïš käyiki* 'the game of the Altun Soŋa (or Suŋa) mountain forest', the second as *alt(u)n soŋa kälip* 'coming to Altun Soŋa' (no doubt the same place as the one mentioned in E28). Radloff did not distinguish between the round ŋ[1] and the diamond shaped n^d. Turkish *şu* comes from the presentative *oş* coupled with the pronoun *o*; Ottoman also has *şol* < *oş ol*.

[347] Forms generated by double case marking are mentioned further on. The Uygur singular oblique forms of *ol* are extensively documented in the UW; no instances will therefore be mentioned here.

[348] Munkácsi 1919: 125 has pointed out that the Uralic languages also have a pronominal *+n* which appears only with the singular forms. Cf. the *+n* which is added to Mongolic nouns in the singular but is replaced by *+t* in the plural.

[349] The Yakut suffix vowel alternation *bas+a* 'his head, nominative', *bas+ïn* accusative seems to preserve an original alternation as found in the Old Turkic pronouns between *bo* (low vowel) and *bun+* (high vowel) and perhaps *käm* / *kimni*.

dative singular, which reminds one of the directive,[350] is limited to the demonstratives: The runiform inscriptions have *aŋar*, not *aŋa; aŋar* is also the general form in Manichæan texts, e.g. in DreiPrinz 27. In Buddhist texts there is a fluctuation between the two forms; cf. UW 162a. *muŋar* is attested in M I 23,8, also in Ht and DLT. The forms *aŋar* and *muŋar* are older than the forms without /r/; the latter were no doubt created in analogy to the personal pronouns (especially since the demonstratives were used for the 3rd person). The variants *muŋa* and *aŋa* occur in late Uygur texts (e.g. *muŋa* in BTT I A_2 24, *aŋa* in Pothi 162, which is Manichæan but late).[351] *muŋar* and *aŋar* are still to be found in Muslim Middle Turkic texts (Ata 2002: 62); when QB 3475 writes *muŋa*, that is for the sake of rhyme with *maŋa*. The /r/ is attested also in the Codex Comanicus and lives on in Tatar and also appears in the dative of the Yakut possessive suffixes.

The directive *aŋaru* is attested once in the Tuñ inscription (l.20) but is absent from Qarakhanid and very rare in Uygur; the UW entry mentions only two instances and the reading of one of these is said to be uncertain. Forms like *ïngaru*, which comes from an alternative but obsolete pronominal stem, are discussed below.

The instrumental of *bo* is *munun* in M III nr. 30 r 5 but *munïn* in the QB. *munun* signifies 'herewith' whereas *anïn* means 'therefore'.

The only case form which appears not to be attested in the singular is the directive of *bo*. This may not be a coincidence: *bärü* 'hither' may be the half-suppletive missing directive. This word has a long vowel in Turkmen (though not in Khaladj), which would speak for a contraction of the stem with the directive suffix.[352] Examples such as *bärü ešidiŋ siz braxmayu* (MaitrH XI 15r23) 'Listen here, you, Brahmāyu!' also speak for this interpretation of *bärü*.

The similative is regularly based on *munï* and *anï*, the forms identical with the accusative but also found with postpositions and, in *munïsïz*

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[350] It would not be correct to call *aŋar* "ein alter Dir(ektiv)", as done in UW 162a, as the directive suffix never drops its final vowel. Even if there really is only a single Old Turkic instance of *aŋaru* attested (as stated in the entry for this form in the 1981 fascicle of the UW) the Tuñ inscription has both *aŋar* and *aŋaru*.

[351] In the UW entry for *aŋa* (which also documents *aŋar*) we read: "*aŋar* ist auch in späten Texten (z.B. BT III) belegt und taugt nicht zur Charakterisierung eines Textes als früh oder relativ früh (gegen M. Erdal: *Voice and case in Old Turkish.* Diss. phil. Jerusalem 1976. Bd.1. *17m.*). Man vergleiche auch die Verwendung von *aŋa* und *aŋar* im gleichen Kont. in Suv ...": While *aŋar* indeed does not characterise a text as (relatively) early, the presence of *aŋa* does appear to characterise it as rather late.

[352] The idea that *bärü* could have come from a contraction with the directive suffix *+gArU* was already expressed by Bang 1919 ff..

(ETŞ 12,47), before the privative formative. Besides, *anča* has a rare variant *anï+ča* (cf. UW). The personal pronoun also appears in the accusative form when serving as base to another common formative, in *biznilig* (quoted above). Concerning the similative, the use of an accusative as stem might be related to the fact that *+lAyU* comes from a formative, *+lA-*, which forms denominal verbs.

montag 'like this' and *antag* 'like that' (in the UW documented on five pages) can both also be translated as 'such'. Their source is the demonstrative oblique stem with the postposition *täg* 'like', here asimilated by synharmonism. Both by stem form and harmony, these are in fact case forms. *montag* and *antag* are used nominally and adnominally, whereas similative *munïlayu* 'thus' and *anïlayu* (always with the particle *ok*, signifying 'in that same way') are in adverbial use.

antag antag 'such and such' serves for alluding to the content of verbal messages, e.g. in Suv 603,11 and twice in Suv 14,11-12: *ärklig xan anï ačïp okïdokta anta antag antag sav ünti: antag antag küntä ... özlüglärig ölürmiš üčün ökünüp tuyunup ...* 'When the ruler of the Underworld opened it and read it, such and such a content emerged from it: On such and such a day he was sorry for and repented for having killed living beings ...'. Another such element is *bo montag* in *birök ... nä nägü iš išlägäli ugrasar ol ugurda "bo montag tül tüšäyök män" tep sözläyür ärdi* (U III 54,15) 'Whenever she intended to commit something ... she used to say "I have just had such and such a dream"': The narrator does not wish to supply the contents of queen Bhadrā's purported dreams but still wants to paint a vivid picture of her behaviour.

The demonstrative conjunction *ančïp* 'doing that, thereupon' appears to have come about through the addition of the converb suffix *-(X)p* to *an+č(a)*.[353] It has turned up only in runiform sources, in the inscriptions of the Uygur steppe empire (ŠU E7 & 8, W1 & 4 and Tes 8 & 14) and in the epilogue to the IrqB. *ančïp* disappeared at an early stage; Uygur (disregarding the IrqB) no longer has it. Uygur *ïnčïp* (presented further on in this section) would similarly have come from *ïnča* with the same converb suffix. The uses and meanings of both words are discussed in section 3.33.

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[353] The EDPT assumes a contraction from *anča är-ip* as the source of this form. Such far-reaching contractions are not otherwise known from the Old (or Proto-) Turkic stage. Phonic regularity can, admittedly, not be expected when a conjunction (which tends to be a relatively short element) is to be derived from a pronoun; but neither can word-class regularity: An unusual necessity as the creation of a demonstrative conjunction can also have stretched morphology to an unusual feat.

ančagïnča 'then, thereupon, in the meantime' appears to have been formed in similar fashion: It probably comes from *anča* and the temporal converb suffix *-gInčA*, which has the meaning 'until' with perfective verbs. The word is spelled with Γ in Manichæan writing, which has no similarity to *ḥeth*; this means that it does not come from *ančak* (< *anča ok*). The three instances quoted in the UW entry for *ančagïnča* spell it with double-dotted *ḥeth* in Uygur writing, which would speak for a voiceless velar, but the Manichæan instance is more dependable for etymology; *ančak* might have had a secondary analogical influence. The phrase *ančagïnča kan* is discussed in section 3.34.

The presentative interjections *muna* and *ona* or *una* (not attested in any script which would enable a choice between /o/ and /u/) are discussed in section 3.4; see below in this section for a possible instance of a similarly formed *ïna*. These elements are not datives, as one might think, as there is no evidence for the dative suffix to have lost its velar in Old Turkic; they may, however, be remnants of some prehistoric case form.

The plural demonstrative pronouns (e.g. *olargaru* in ManUigFrag r 11, *olarnï* in Pothi 99, *olarka* in Pothi 165 and 227, *olaran* in ManTraktNeu p.93, *olarnïŋ* and *olarta* quite a number of times in Abhi, etc.) are not found in the runiform inscriptions, except perhaps a single instance of *olar*. This reminds one of the fact that, in the earliest texts, the singular possessive suffix is used also for pluralic possessors. *olar* is never spelled with two L's; there is therefore a (slight) possibility that the /l/ in the singular form *ol*, which stands alone in the whole pronominal domain, comes from a back-formation of the plural form. The process /ll/ > /l/ (documented in section 2.405) is, however, clearly an early one and *elig* 'king' < *el+lig* is never spelled with LL either.

Forms with double case suffixation having *+čA* as first element are *munčada* (M II 5,8$_1$) and *ančada* 'then' (usually spelled with *t* and correlating with *näčädä* 'when'), *munčulayu* (see OTWF 410 for examples) and *ančulayu* 'thus' with raised middle vowels, *munčan* (Ht V 21,3) and *ančan* 'a bit; gradually',[354] and *ančaka*, which is attested

[354] The UW states that *ančan* comes from its *anča* II, which it translates as "diese Zeit, jene Zeit". By meaning, however, this word accords with the one mentioned for *anča* under (I) A, b, viz. 'a little bit' (the instrumental suffix is added to this merely to signal adverbial use). *ančakya* 'just a little bit' (which also has an entry in the UW), also comes from this same *anča* and not from Röhrborn's *anča* II. He should therefore either posit a second autonomous *anča* or review the procedure of assuming autonomy whenever a pronoun appears with double case suffixation.

only in the common phrase *ančaka tägi* 'till then' (always spelled as one word). It remains unclear what relationship there is between *ančulayu* and *ančula*, a rare Manichæan synonym used in correlation with *kaltï*. In *ančada bärü* (DKPAMPb 641) and *ančaďïn bärü*,[355] *munčada bärü* (M II 5,8) 'since this much time' or *ančada ken* (Suv 625,21) 'from then on', the second suffix is governed by the postposition. Uygur evidence for the *ančа+* and *anta+* forms can be found in the UW. One might expect *ančada bärü* to signify something like 'after all that time' whereas *antada bärü* is 'since then'.

munďïrtïn (Kuan, TT VIII) and *muntïran* (e.g. Ht III 155), *anďïrtïn* 'from there' and *anďïran* (also *antran* e.g. in MaitrH XX 14r7, *antïran*, *antaran* e.g. in MaitrH Y 230) 'from there, away; thereafter' show an intercalary element *+dIr+* which has no independent existence in Turkic; cf. *+dUr*, the main variant of the dative suffix in Mongolic.[356] This element is attested also in *mintirtin* 'from me' and *sindirtin* 'from you', where it is added to personal pronouns, and in the interrogative *kantïran* / *kantaran* 'from where'. Outside the pronominal domain we have a small group of *+dXrtI* forms from local bases discussed in section 3.31, *üstürti* 'from above', *ičtirti* 'innerly', *kedirti* 'from behind' and *öŋdürti* 'from the front'; *ičtirtin ünmiš* 'emerged from inside (the palace)' in Ht VII 1113 has the ablative suffix instead.[357] The suffix in *kün+tüz* 'during daytime' seems to be the only case where it appears by itself, with word-final zetacism. The exact semantic or functional difference between the demonstratives with *+dIr/dXr+* and their simple ablative forms remains unclear. It is noteworthy that the dative is the only primary adverbial case form not used as first element in any double-case sequence of demonstrative pronouns; Old Turkic *+dXr+* / *+dIr+* might thus originally have been an allomorph of the dative suffix, which it is in Mongolic.

The accusative is not involved in any case suffix sequence in this sense, but serves as oblique base.[358]

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[355] Probably to be read in a document referred to in UW under *anïnďïnbärü*.

[356] /U/ is the regular Mongolic cognate of /X/ while the Turkic instances point towards /I/ in their suffix when added to demonstratives (unless the rounding in the second syllable is secondary). Cf. *+dXrtI* below; neither that nor the forms with the personal pronouns, nor *kün+tüz* 'during the day' speak for /I/.

[357] *taštï[r]tïn kälip* 'coming from outside' has been restituted by the editors in MaitrH Y 164. This conjecture must remain questionable in view of *tašďïndan* / *tašďïnďïn* with exactly the same meaning in the ŠU inscription.

[358] *munïlayu* and *anïlayu* are here not treated as double-case forms, as we have no *+lAyU* derivates from the simple bases, as other pronouns use the acusative form as oblique base and as the presence of the accusative morpheme can hardly have been

The most 'combinable' case suffix with demonstrative pronouns appears to be *+dA*,[359] from which we have *antača* 'there' (documented in the UW) and *mundača* 'here' (Abhi A 3071 together with *andača*). *antada* is 'there; then'; but the second *+dA* can also be ablatival, in the comparative construction when followed by an adjective, and in *antada bärü* 'from then on, since then'. *antadata bärü*, which is a hapax in the Xw, is either an error or it follows the logic of linking the construction of *antada bärü* with the meaning 'then' of *antada.* Beside *muntadan* (M III 23,9) and *antadan* or *antadïn* (Tes 13, a runiform inscription; third vowel not explicit) we have the much more common *muntada* (*muntuda* in KP 34,8 and 37,4) 'herefrom'. It is often (Maitr) governed by *ken* with the meaning 'hereafter', by *öŋrä* to give 'before', by *üstün* to give 'above this', by *ïnaru* to give 'beyond this', by *ulatï* (also in BT II 623 and 1315 and often Suv and Tattvārtha) to give 'beside this'; in Suv and Tattvārtha we often find *muntada adïn* meaning 'except this'. Some of these expressions are found also with a variant *mïntada*, e.g. *mïntada adïn* in one of the two mss. in Suv 9,1, *mïntada ken* in Maitr 136r5 and MaitrH XIII 4v19, *mïntïda ïn[a]ru* in Maitr 8v27, *mïntada ozmïš kutrulmïš ärmäz sän* 'you have not (yet) been saved from this situation' in Maitr 116 v9, *bilgä biligin mïntada utduŋ yegädtiŋ* (U II 21,11) 'With wisdom you have succeeded in this matter'. In his Maitr edition, Ş. Tekin had translated the Maitr 136r5 instance as "an meiner Stelle",[360] and the Maitr 8v27 instance as "von mir an", as he read the word I have transcribed as *mïntada / mïntïda* as *mintädä / mintidä* and thought it was an oblique form of *män* 'I'; *mindidä* does indeed exist (e.g. in Maitr 187r11 quoted in the previous section), and the only thing which makes this reading less likely here is the context.

The hapax *anïŋdïn* in Suv 26,18 appears to be governed by *ken,* the phrase signifying 'thereafter'.[361] If this is not a copyist's error for

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motivated by government or by meaning. Concerning the dative cf. *ämdi+gä+čä* in Rabġūzī 171,18 as quoted by Schinkewitsch 1926: 24.

[359] Turkish in fact has a similar combinability, with *o+ra+da, o+ra+dan* etc. formed from a base signifying 'there'. The UW uses the term 'Hypostase' for the first element; that would imply that the stem + first case suffix are equivalent to a nominative, which is not the case when considered from a content point of view. Rather, the Old Turkic state of affairs has something of the prepositional combinability we see in English *from under the table*.

[360] This is also the translation supplied by Geng et al. for MaitrH XIII, 4v19.

[361] After *anïŋdïn* there is a hole for the cord binding the leaves together, and it has been thought that there is a lacuna between that hole and *ken*. The ablative must, however, have been governed by *ken* (the passage is not otherwise fragmentary, as written in the UW), and it seems possible that nothing was written in that torn stretch. Zieme in AY I writes *anïŋdïn [aṣu] kin* and translates "davor (?) [oder] danach" but I

ančadïn, it might follow the late replacement of the accusative of pronouns by their genitive when governed by postpositions.

anta and *munta* are made adnominal with *+kI*, the converter discussed in section 3.126. Examples for *antakï* can be found in the UW; an example for *muntakï* is *muntakï yörüg* (BT I A_2 15) 'the interpretation to be found in this'. *+kI* can, of course, be added also to plural demonstratives, as in *bo+lar+ta+kï+g* in Abhi A 727; this form also shows that the *+kI* expansion of a pronoun need not get the pronominal variant of the accusative suffix (i.e. *+nI*).

In view of pronominal forms like *mïntada* 'from here on' (the variant of *muntada* documented above) and *bo künta mïnča* 'from today on' (SUK WP2,8 etc. and Murtuq 9; some examples of *mïnča* are quoted in the note to this latter) alternating withs *bo küntin mïnča* (SUK Sa11,7 and 12,8 and 12) it seems conceivable that the rounding of the first vowel in the oblique forms *munï* etc. should be secondary and due to the rounding effect of the onset labial consonant.[362] The stems **bïn+* and **bun+* could, however, also have been distinct, as *ïn+* differed from *an+*. Cf. also *mïnta ken* 'from now on' in SUK WP1,4: This is a demonstrative if it signifies hereafter' but a personal pronoun if it signifies 'after me'.[363] An additional form of the stem *mïn+*, with the orientational formative *+dXn*, is found in the phrase *ïntïn mïntïn ikidinki yer oronlar* (ms. Mz 704 v15) 'the places on both sides, this side and that side' and presumably became also part of the petrified phrase *äŋ mïntïn* documented in UW 388.[364]

ol is often used also as 3rd person pronoun to express verbal agency (discussed in section 3.22); in this function its use blends over into being a copula (cf. section 3.29). The phrase *anta munta* (e.g. DKPAMPb 1184) signifies 'in all sorts of places'; it thus lost its demonstrative force and got lexicalised.

Beside the stems *bo* / *bun+* and *an+* (and possibly **bïn+* as mentioned on the previous page) there also was a pronominal stem *ïn+*. The following case forms are attested: *ïnča*, which usually means 'the

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don't think it is possible for *anüŋdïn* to signify "davor". If it were certain that a word is missing, Kaya's a*šnu* would fit the context better. No Berlin fragments have been discovered for this passage.

[362] See section 2.402 for early vowel rounding due to onset labial consonants.

[363] Both are possible in the context but the editors have chosen the first translation.

[364] This is also from where I quote the instance in Mz 704 v15 mentioned above. The phrase was misunderstood by the EDPT, which considers it to be the ablative of a noun *'aŋmïn'* but also erroneously proposes to emend it to a converb form '*aŋ-matïn*'.

following, in the following way' (in general opposed to *anča*, which, in intratextual deixis, is anaphoric);[365] *ïntïn* '(the one) on the other side' (opposed to *muntïn*, e.g. in a ms. quoted in the note to BT I D 37, or *mïntïn* 'the one on this side', as mentioned in the previous paragraph); *ïnaru* 'forward; from ... on'[366] (opposed to *kerü* 'backward' < **ke+* 'back', or to *bärü* 'hither' as in the phrase *ïnaru bärü* 'back and forth' attested e.g. in TT X 513). *ïna*, a demonstrative interjection (cf. section 3.4), may be attested in fragmentary context in BT XIII 5,63; as stated by the editor, its relationship to *ïn+* would be similar to *muna* and *ona* or *una* with respect to *bo* / *mun+* and *ol* / *an+*. There is, finally, the proverbal *ïnčïp* or *inčip* 'that having happened; thus', attested in Manichæan, Buddhist and Christian sources; see section 3.33 for its function. It appears to come from the hybrid addition of *-(X)p* to *ïnča. ančïp* (discussed earlier in this section) is, on the other hand, attested only in inscriptions of the Uygur kaganate and in the equally runiform ms. IrqB. *ïnaru* is clearly related to *ïngaru*, attested (with g^1) in ŠU N10 in the phrase *anta ïngaru* 'from then on, thereafter'. The form *ïngaru* is unusual in that the dative and directive forms linked to the pronominal *+n+* otherwise appear with /ŋ/; it may be archaic or, alternately, an analogical restitution. The intermediate stage appears, according to the Thomsen-Wulff materials, to be attested in the Yenisey inscription E29,3 as $ŋ^2r^1w$, presumably to be read as *iŋaru*.[367] This is a rare bit of evidence, as there are, in the whole runiform corpus, only a few Yenisey inscriptions which distinguish between $ŋ^1$ and $ŋ^2$. It also shows that this stem vowel, like other instances of first syllable /ï/ without adjacent /k/, turned up as [i], phonetically though not phonologically (since the second syllable is shown to have been back-harmonic by the second and third runiform characters). This stem reminds one of the Mongolian genitive pronominal form *inu*.[368] *ïnča* must have had a variant *inčä* since, together with the particle *(O)k*, we get both *inčäk* (generally) and *ïnčak* (spelled with double-dotted Q in Manichæan

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[365] In a Maitr passage quoted in UW 134a, *ančama* and *ïnčama* (see section 3.342 for the particle *mA*) correlate as 'as ... so'.

[366] The EDPT confuses *aŋaru* (the directive of *ol* 'that') and *ïnaru* and lists the instances of both under the former. Another example occurs in Yosıpas 62. From the DLT and the QB on, *ïnaru* is shortened to *naru*.

[367] The Orkhon Turkic rule, whereby the only first-syllable vowels not made explicit were /a/ and /ä/, did not hold in many Yenisey inscriptions. It cannot, on the other hand, be quite excluded that $ŋ^2$ was, in this case, used for $ŋ^1$ (as is always the case in the inscriptions of Mongolia).

[368] This comes from **ïnu*, as the second vowel is not *ü*; cf. the Manchu 3rd person pronoun *i*, which has *in+* as oblique stem.

writing in M I 7,17).[369] Brāhmī also helps to show that both *ïnča* and *inčä* existed, since we find the second vowel spelled as A in TT VIII H 1 but as Ä in TT VIII K and O (twice). It further helps in determining (with two instances) the reading of *ïnaru* as having back and not front vowels. The runiform script is of no use, on the other hand, in distinguishing between the front and back possibilities, as the signs for I, A and the ligature *nč* are all indifferent to palatal harmony. *inčip* can also very well have existed beside *ïnčïp*; the runiform script would again be of no help, as the sign for *p* is also neutral. The back vocalism of *ïntïn* follows from the form *ïntïnïntakï* 'what is beyond it' attested in Suv with X. While *ïnča* can be related to Mongolian *inu* mentioned above, *inčä* reminds one of the 3rd person possessive suffix, which may have had a consistent front vowel in Proto-Turkic, i.e. not to have followed synharmonism:[370] There are some reasons for believing that *+I(n)+* and *+sI(n)+* once were two distinct and independent pronouns which subsequently got morphologized into complementary distribution; the former would then be identical with the stem of *inčä*. In Gabain 1974: 92 we find that the list of *in+* / *ïn+* forms has the title "Reste der 3. Person (?)"; the meanings which these forms have does not speak for this hypothesis, but the possible link with the 3rd person possessive suffix does. On the other hand, the source for *inčä* and *inčip* clearly was the fronting of first-syllable /ï/, which altered the harmony class of many one-syllable stems (here especially with the fronting effect of *č*; see section 2.23). In that sense, any consistently fronted *+(s)i(n+)* may also be secondary. Doerfer in a 1964 paper quoted in Zieme 1969: 255 also expressed the view that the pronoun must have had back vowels, citing Tuvan *ïnča*. In section 3.234 below I propose that the future suffix *-gAy* should come from *-gA* (discussed as a formative in section 3.113) through the addition of the nominative of **ï* / **i* before *ol* replaced it as clitic personal pronoun. In view of the opposition of *ïntïn* to *muntïn* and of *ïnaru* to *bärü*, *ïn+* appears to have had a 'there' deixis. This accords with its link to the 3rd person. The adjective and postposition *sïŋar* 'side; one of two; in the direction of' may originally have been the dative of *+sI(n)+*, the other possessive suffix, while *sïŋaru* 'in the direction of', posited as a postposition in Hesche 2001, may have been its directive.

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[369] The word spelled with the n^č ligature and k^2 in runiform U 5 (TM 342) v2 is presumably also to be read as *inčäk* although it lacks a vowel sign in the beginning, as no *'äncä'* is otherwise known to exist; *ikinti* in r10 *is* spelled with an I the beginning.

[370] Thus still today in Chuvash, possibly secondarily also in some other Turkic languages and, according to the choice of consonants, in Orkhon Turkic.

3.133 Reflexives

käntü 'own, one's self' (in Uygur practically always spelled as KNTW) is linked to the expression of number, possession and case, expressed e.g. in *bodisatvlar käntülärinin̥ enčin mäŋisin tilämädin* ... 'the *bodhisattvas* do not pursue their own peace and happiness but ... (Suv 227,14); its declension differs from nominal declension only in the accusative *käntü+ni* (e.g. in DreiPrinz 14). Other forms are the genitive *käntünüŋ*, the dative *käntükä* and the instrumental *käntün* 'by itself'. Here are examples of its use to stress the identity of a verb's subject in whatever person: *ädgü eliŋä käntü yaŋïltïg* (KT E 23 & BQ E 19) 'You yourself erred towards your good country'; *käntü tugmïš kïlïnmïš mäŋigü täŋri yerin unïtu ïtdï* (Xw 14) 'He completely forgot the divine land of gods where he himself was born'; *käntü on ädgü kïlïnč küzätdim* (MaitrH XV 13r16) 'I myself observed the ten good deeds'.[371] *käntü* can also get governed by postpositions; e.g. in the following example, in which it is used anaphorically: *yana olok yäklär ičkäklär yegädürlär tïltag bolurlar käntülärni üzä elänürlär* (TT VI 267 f.) 'Again those same demons prevail; they (the ignorants) are the cause and they (the demons) rule over *them* (i.e. over the ignorants)'.

käntü is also used attributively, for stressing possessive suffixes (where *öz* is possible as well): inscriptional *käntü bodunum* (KT N 4, ŠU E2) 'my own people'; Manichæan *kün t(ä)ŋri ... k(ä)ntü yarokïn kamagka yarotïr*[372] (M III 7 I r 9) 'The sun … shines on everything with its own light'; Buddhist *käntü köŋülüm üzä alkunï ökünür män* (Suv 100,23) 'I repent for everything with my own heart', or *kšanti kïlmaklïg arïg süzük suv*[373] *üzä käntü agïr ayïg kïlïnčlïg kirlärin tapčalarïn yumïš arïtmïš kärgäk* 'One needs to wash away and clean the dirt and filth of one's own grave sins by the pure and limpid water of repentance' (Suv 142,1).

With *käntü* in the genitive: *tesilär*[374] *käntünüŋ xoštisiŋä inčä tep sezinč aytïlar* (M III 6 II v 10) 'The disciples expressed doubts towards their teacher with the following words:'; note the singular possessive suffix. *käntü käntü* (runiform ms.; also e.g. Suv 19,15) is distributive 'each his own'; e.g. KP 2,5: *adrok uzlar käntü käntü uz išin išläyür* 'Different specialists carry out each his own profession'. *käntü* is

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[371] This function as well as the attributive use mentioned below are no doubt the reason why Tekin 1968 calls *käntü* and *öz* 'intensive pronouns'.

[372] Spelled YR'WQ'YN QM'ΓQ' YR'WTYR.

[373] I take *sav* of the Petersburg edition to be an error, since the context demands an extended metaphor of dirt getting washed away by pure water.

[374] Thus instead of the expected *tetsilär*.

further used adverbially, to stress the identity of the subject of the verb; cf. *käntün käntün* (SP 39) 'each for himself'.

In Qarakhanid this element is spelled as *kändü* with *dāl* (3 exs. in the DLT, 5 in the QB, all mss.) in both attributive and predicative use. Conceivably, the dental was a voiced stop also in other Old Turkic sources.

öz, primarily a noun signifying 'innermost (part)', became the pronoun 'self'; it is very well attested with this meaning already in Orkhon Turkic. An Uygur example would be *özlärin saklanu ... täzgürü tutzunl[ar* (M III text 20, 38,6$_1$ + ZiemeTexterg II) 'Let them keep themselves guarded and evasive'. With possessive suffix and dative, *öz* is a mark of the self-beneficiary: *el[ig] bäg ... öziŋä olorgu äv etdürti* (Ht III 739), e.g. signifies 'The ruler ... had a house made for himself to reside in'.

öz can be used in a subordinated construction merely for referring to the subject of the main clause; e.g. *birök öziŋä kïlmagu täg nä nägü iš išlägäli ugrasar "..." tep sözläyür ärdi* 'if, however, she intended to do something which *she* wasn't supposed to do, she would say "..." (U III 54,15). *öziŋä* here refers to the subject of both *išlägäli ugra-* 'to intend to do' and *sözlä-* 'to say'; it is neither reflexive nor focalised.[375]

The passage quoted at the beginning of this section for *käntü* also shows that clause repeated seven lines further on with *öz,* as *käntü özlärініŋ ençin mäŋisin tilämädin ...* (Suv 227,21-22) 'without striving for their own ease and happiness'; cf. further *k(ä)ntü özüŋ bäglik är taplagïl* 'You yourself chose a man to be (your) husband!' (U II 21,14). The phrase *käntü özi* is common, e.g. in Suv or TT X 275. *käntü özümüzni küntä ayda öŋi biz tedimiz ärsär* (Xw) 'if we said about ourselves that we are not related to sun and moon' is an instance of indirect speech in which the speakers are also the subject of the clause which serves as object of *te-* 'to say'; from this arises the need for *käntü özümüz*. *käntü öz* can also be used adnominally, e.g. in *käntü öz elin ičrä* (M III nr. 8 III v 15) 'in their own realm'. The order of the two can be reversed: *öz käntüŋkä ïnangïl* (TT I 40) 'Trust yourself!' shows the phrase in reflexive use, with possessive suffix and dative.

Another use of *öz* quite common in Orkhon Turkic is for *öz+üm* to follow *bän* / *män* 'I' or for *öz+i* to follow subjects for introducing them as topic or for stressing their identity: *bän özüm tavgač eliŋä kïlïntïm* 'I myself was born in China' (Tuñ 1); *ilitbär*[376] *özi kälti* 'The governor

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[375] *öz* is used in the expression *öziŋä kïlmagu täg* which qualifies *iš*, the object of *išlägäli ugra-*. It appears in the dative because the action is unsuitable *for* the subject.

[376] Cf. Sims-Williams 2002: 235 and 2000a for the way I read this title.

himself came' (KČ E9) It can also follow genitives of personal pronouns for rhematization; e.g. *alko tïnlïglar mäniŋ yatïm ärmäzlär. ogulta kïzta amrak mäniŋ öz kišilärim ärürlär* '... they are my own people, dearer (to me) than sons and daughters'. Note that *köz* needs no possessive suffix in *m(ä)n kičigkiämtä ... öz közin ädgü irü bälgülär körmišimkä* (Ht) 'since I had, in my earliest childhood, seen good omens and signs with my own eyes, …'.

Further, *öz+üm* refers to speakers, *öz+i* to subjects, especially when they become new topics opposed to the previous ones, serving the verb as subject in apposition to its subject reference. This is very common in Orkhon Turkic, e.g. *xagan učdokta özüm säkiz yašda kaltïm* (BQ E 14) 'when the king died I was left behind, seven years old'. In *özüm amtï ačïnur män* 'I am now confessing' (UigStud 35) or *sü yorïdï, özümün öŋrä bïŋa bašï ïttï* (ŠU) 'He marched out and sent me forward as captain' *öz+üm* is object. In *öziniŋčä* 'like his own' in M III text 8 VII r 14, *öz* receives two case suffixes.[377]

Finally, *öz öz* signifies 'each his own', like *käntü käntü* mentioned above; e.g. in *bo üč teginlär öz öz köŋüllärintäki sakïnmïš savlarïn sözläšip ...* (Suv 609,12) 'These three princes discussed the matters which each one of them had thought in his heart' or *eliglär bäglär öz öz uluška bardïlar* (U III 54,7) 'The kings and lords went each to his own realm'.

ät'öz 'body' appears sometimes (though rarely) to be used as reflexive pronoun, as pointed out in OTWF 752 discussing the sentence *ät'özin ketärü täzgürür bolur* (Ht X 549-50) 'He becomes reticent'.

3.134. Interrogative-indefinites

The interrogative-indefinite pronouns are *käm/kim* 'who', *nä* 'what' and the pronouns from the stems *ka+* and *kañu* 'which', this latter possibly an expansion of *ka+*.[378] The set of pronouns discussed in this section unites different functions (as happens with such pronouns in a wide variety of languages): They serve with interrogative content, given in the first line of the table, but also as indefinites, i.e. they can also signify 'anyone', 'anything', 'anywhere' and 'any' respectively. Some

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[377] The matter is discussed towards the end of section 3.124.

[378] The table below lists forms of both *kañu* and *kayu*, because the former changed into the latter with the fusion of /ñ/ and /y/ in the course of the history of Old Turkic; the table only mentions those forms of *kañu* which I have found to be attested. Bang 1917: 27-33, dealing with a number of derivations from *ka+* in the Turkic languages, proposes the second syllable of *kayu* to be a different pronoun, but no such pronoun is attested anywhere in Turkic.

of these elements are secondarily also used as relative pronouns. The distinction *kim* / *nä* grammaticalizes an 'animate' / 'inanimate' opposition not relevant elsewhere in the grammar, with the position of animals an interesting middle in view of the Buddhist doctrine to which the authors of most of our texts adhere. All interrogative-indefinite pronouns can, in principle be used either as NPs by themselves or appear attributively, both in interrogative and indefinite use.[379]

	'who'	'what'	'where'	'which'
Nom.	käm / kim	nä		kañu / kayu
Gen.	kimiŋ / kimniŋ	(näŋ)		kayunuŋ
Dat.	kämkä / kimkä	näkä	kaŋa	kayuka
Acc.	kimni			kayunï
Loc.	kimtädä	nädä	kanta	kañuda / kayuda
Abl.			kantan	kayudïn
Equ.		näčä	kanča	
Dir.				kañugaru

These pronouns have a rich case declension; additional irregular case forms not listed in the table are mentioned below. Their number declension is rather weak: We find *kimlär* e.g. in MaitrH XXV 2v20 or BT I $A_2$15 and E11, *kayular* e.g. in TT V B2.

The plural of *nä* appears to have been *nägü*, formed with the collective suffix *+(A)gU*; see OTWF 95. There are more instances in IrqB XXIV, U IV A42, Ht VII 1995 and Suv 610,11 and 621,4; e.g. *takï nägü kütär sizlär* (U I 43,7) 'What else are you waiting for?'. *nä nägü iš* (U III 54,13) is 'any sort of business'. *nägü* inflects for case as, e.g., *nägüdä ötgürü* (U II 5,14) 'through what things'. *näg(ü)lük* 'what for; to what purpose; why' is a derivate from *nägü*, attested e.g. in U IV A26, Suv 612,8, KP 4,9, 30,1 and 66,6 and often elsewhere. *nägük* (twice Suv) apparently comes from *nägü (ö)k* with the emphatic particle.

With possessive suffix we find e.g. *kim+i* 'who among them' in *kimi ärür kimi ärmäz* (Abhi B1405) and *kayu+sïŋa* (KP 6,2) 'for which of them'; the referents of the possessive suffixes are the groups from within which the pronouns select their referents. *kim+iŋä* (as well as *nägü+siŋä* and *nä+siŋä* reconstructed there) are in SUK WP6,28-30 used in indefinite meaning, with the possessive suffix referring to a possessor in the strict sense: *bagïŋa borlukïŋa nägü[siŋä] kimiŋä basa*

[379] This also holds for *kim* which is, in Republican Turkish, not used attributively but replaced by *nä* in this function.

... *anïŋ ädiŋä tavarïŋa nä[siŋ]ä kimiŋä* ... 'concerning his ... vineyards and anything or anybody belonging to him ... his possessions, anything or anybody he possesses'; the contract covers a transaction both of land and of slaves.

The nominative and the dative of *kim* 'who' appear as *käm* and *kämkä* in the Orkhon inscriptions (KT E9 and 22 and BQ E19), no other case forms being attested there. *käm* must also be read in the runiform ms. BlattRun 27, as the vowel of this word is implicit and first-syllable [i] is written out explicitly everywhere in that ms.[380] Originally there probably was an apophony *käm* (low vowel in the nominative) vs. *kim+* (high vowel in the oblique cases), with the same alternation as found for the demonstrative and personal pronouns. This hypothesis would explain why this pronoun turns up in so many shapes in the Turkic languages (e.g. *kam* < **käm* in Chuvash). In fact, however, *käm* appears as the only stem in the Orkhon dialect, while Uygur sources (including BuddhKat, which is in Tibetan script) have *kim* in all forms. So it may also be the case that the Old Turkic dialects settled for one or the other stem of this pronoun already at this early stage (the 9th century, at the latest).

Like *käntü*, *kim* and *nä* have the nominal case forms, except that *kim* gets the accusative alternant *+ni* (which is itself gradually introduced into the nominal declension in the course of the development of Old Turkic); e.g. in *kimni üčün* (U III 22,5) 'for whose sake'. The genitive practically always has *+niŋ*; *[k]imiŋ ol* 'Whose is it?' in Yosıpas 52 (an early text) can, however, hardly be reconstructed in any other way (the facs. is clear).[381] The accusative of *nä* may not have been in use at all. *kimkä, näčä* (e.g. Suv 118,4, Xw 80, U III 73,2, M I 7,12 and 15,6), *nädä* (e.g. Xw 135 and 137 and M III nr. 6 II v 13), *näkä* 'why' (e.g. Tuñ 40 and KP 5,2) have no 'pronominal *n*'. Nor does *nä täg* 'like what' (e.g. IrqB, M I 23,6), unlike its demonstrative counterparts *antag* and *montag*. The only exception appears to be *nänčä* in fragmentary context in BQ N 9, of which Thomsen says "leçon qui me parait sûre". *kač* (see below) also appears to be a derivate from **ka+* lacking the pronominal *+n+*. A form *kimtädä* appears in ablative use in *s(ä)n bo užakag kimtädä bošguntuŋ?* (MaitrH XI 15v25) 'From whom did you learn this alphabet?'. A pure locative of *kim* may not be attested because persons (which is what *kim* asks about) are not 'places' for things to be 'at'.

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[380] The /ä/ is certain: The 31 line ms. has only one instance of implicit /i/ and that is in a second syllable; the text generally only makes (non-long) /a/ and /ä/ implicit.

[381] See section 3.341 for a form spelled *kimiŋ* which is not a genitive.

näŋ 'thing' is here taken to come from an obsolete genitive of *nä* 'what' which, in indefinite use, signifies 'anything'; Bang 1917: 18 already links *näŋ* with *nä*.[382] The same must be the source of the particle *näŋ*, which stresses negation.[383] In Tuñ 56 *näŋ* is used in a way not (I think) attested anywhere else, again with the meaning 'any': *näŋ yerdäki xaganlïg bodunka bintägi bar ärsär nä buŋï bar ärtäči ärmiš* 'If an independent nation anywhere were to have one like like me, what trouble could it ever have?'.

näčä 'how much, how many; inasmuch as' becomes a stem for secondary case forms, as *näčädä* 'at some time, at some stage; whenever' (U III 43,19, Ht VIII 83, BT I D 291, TT X 539 etc.). It also gets governed by postpositions and then appears in the case forms which they demand; e.g. *näčäkä tägi* 'insofar as' (e.g. in M I 16,16) or *näčädä ken* 'after some time' (e.g. in Suv 619,18). These forms correlate with *anča, ančada, ančaka tägi* etc. in complex sentences in which the interrogative form appears in a *-sAr* clause, the demonstrative form in the main clause (see section 4.65). *kim* is also attested with double case suffixation in *bo užakag kimtädä bošguntuŋ?* (see above).

näčük (spelled with *ü* in the ms. Maue 1996 3 nr.12; from *nä+čä ök*?) 'how'; also 'why' and *nätäg* (*nä* with the postposition *täg*) 'like what' (e.g. in M I 23,5) also became secondary bases and function as pronominal stems in their own right: We find the instrumental forms *nätägin* 'in analogy to what; how' (TT V B 44, BT II 939, Ht III 633) and *näčükin* 'how' (e.g. KP 12,6) and 'when' (twice in U I 6, Magier). Kāšġarī (fol.197) says that *näčük* 'Why?' was characteristic of the Yabāqu dialect and that all the other Turks used *nälük* (< **nä+(A)gU+lXk*) instead. Another derivate from the extended base *näčük* is *näčükläti* 'in what manner, in what way', documented and discussed in OTWF 406. I take this, *nätägläti* (Suv 65,22 and 588,16), *birtämläti* 'once and for all' and *kaltï* (see below) to be formed with two adverb-forming suffixes, *+lA* and *+tI*.[384] *nämän,* an instrumental expansion from *nämä* < **nä ymä* attested e.g. in BT I A_1 14, and Ht I 27

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[382] A number of modern words for 'thing', like *nimä* or *närzä*, also come from 'what'; South Siberian 'thing' words like *ču* and *čü* come from Mongolic 'what'.

[383] See section 3.341. Stressing negation is also one use of English 'any', and cf. French *ne ... rien* < Latin *rem* 'thing (acc.)'.

[384] Cf. section 3.31. We are aware of the similarity of *+lA* to *+lA-* and of *+tI* to the second part of the negative converb suffix *-mAtI* which presumably was a converb in its own right prehistorically; the sequence *+lA+tI* may have been analogically influenced by *+lA-tI*.

and 54, appears to be an interjectional interrogative with a meaning like 'how!' or 'what?'.

The nominative of **ka+* is not attested;[385] nor do we have its accusative or genitive, the other two cases with abstract meaning. A common case form from this stem is *kanta* 'where' (e.g. Wettkampf 28, KP 58,4, BT I $A_1$1, DKPAMPb 843, several times in Suv all spelled with T). DLT fol. 38 spells the form with *dāl* (not *dhāl*) and TT VIII F 7 (Brāhmī) has *kanda*; what is spelled *kanta* was therefore pronounced with the stop [d] (see section 2.409). We also have the ablative *kand(a)n* (Orkhon Turkic: KT E23 twice and the parallel text BQ E19 twice, all spelled with the NT/ND ligature) and *kan+tïr+an* (Uygur, e.g. Suv 390,2; *kantaran* in MaitrH XV 7r4) 'from where'. *kanča* can signify 'how much' (e.g. U III 36,10) or 'how far', 'where to', 'by which way' (e.g. U II 25,21, DKPAMPb 840 etc. with *bar-*). *kaŋa* 'to which place' is attested in Maitr 12v21: *ätözümtäki küčümin sän karïmak elitü barďïŋ; kaŋa yatzun?* 'Old age, you have taken away the force in my body; where should it (i.e. my body) lie down?'. *kaŋa* is exceedingly rare; the 'movement to' meaning otherwise typical for the dative and the directive appears, for this base, to be covered by *kanča*, e.g. in *kanča barïr siz* (KP 78,1-2) 'Where are you going?'.

kanï 'where?' serves in regular and rhetorical questions (cf. part V); it has accusative shape but serves no direct object function. It is used twice in Orkhon Turkic and appears nearly 70 times in DLT and QB but I have come across only a single Uygur example.

The meaning of *kač* was 'how many' whereas *näčä* primarily signified 'how much'. Therefore *kač* appears to have been used only adnominally (*kač kata, kač kün, kač yïl, kač törlüg, kač yaŋlïg, kač bölük, kač ïgač* etc.) whereas *näčä* could be used for qualifying both nounns and verbs. *kač* being morphologically more opaque, one would in principle expect it to be older than *näčä*. There appears to have been a gradual replacement of *kač* by *näčä* during the history of Uygur; the Suv, e.g. has only two examples of *kač* (both *kač törlüg*) but more than 70 examples of *näčä*.[386] Many of the examples of *näčä* could, in the

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[385] It may have survived in Khalaj, though Doerfer (1988: 108 and elsewhere) does not express himself very clearly on this: What is actually attested may only be *qāyan* 'whereto', which seems to consist of *qā* fused with *yan* 'side' (cf. *kan+ta yan* in Tuñ and other such forms with vowel harmony, in section 3.32). Khalaj *kā* may also be a contraction of the dative form. Note that standard Republican Turkish does not have *nere* either (though it has *nere+de* 'where' etc. and, for the nominative, *nere+si* 'what place').

[386] Note that Turkish has only *kač* 'how many' but replaced *näčä* in the meaning 'how much' by *ne kadar*; it retains *nice* in exclamatory or indefinite use (limited to dialectal,

contexts of other texts as well, have been translated both as ‘how many’ and as ‘how much’. *kač* is probably derived through a short variant of the equative suffix, the full form presumably serving as base to *kačan* ‘when’ (< **ka+ča+n* with the instrumental).

kačan is rarely interrogative (there is such an instance e.g. in ZiemeAra 83) but is used as an indefinite element signifying ‘at some point in time’; two examples for that are quoted further on in this section, some additional ones in section 3.31. It often introduces temporal clauses with *-sAr* or with *-dOkdA* (section 4.633). *näčädä* is also temporal and might be translated as ‘at some stage’; this is another case of competition between *ka°* and *nä* stems.

kaltï is attested as interrogative pronoun in IrqB 45, in the sentence *kaltï uyïn* ‘How should I get on?’. It presumably comes from *ka+la+tï*, with the middle vowel syncopated due to strong accent on the first syllable: The *ka+* forms appear to have first syllable stress, as we see from modern forms such as *kanča, hangi, hani, xačan, hara* etc.. The sequence *+lA+tI* is earlier in this section documented also from other interrogative bases.[387] *kaltï* is attested as an element introducing object clauses of content in *yaroklï karalï kaltï katïlmïš ... tepän biltimiz* (Xw 135) ‘we know how light and darkness were mixed’ and is also used as a particle signifying ‘for instance’; it is often found in comparative clauses (section 4.632). *kalï* appears instead of *kaltï* in Qarakhanid, where it is rather common. In DLT fol.549 we read that it signifies ‘how’ or ‘if only’ or ‘when’ and get examples for two of these meanings; here is the interrogative one: *sän bo ïšïg kalï kïltïŋ* ‘How did you do this affair?’. No etymological explanation for *kalï* is forthcoming; it could also (though attested less early) have actually been the source of *kaltï*.

kañu > *kayu* ‘which’ must also somehow be related to **ka+*, though the exact relationship is, again, obscure. 12 among the Brāhmī and Tibetan script instances spell it with *u*, 7 with *o* and 3 (in BudhKat) have *kayol* < *kay’ ol* ‘which (is) it?’. We have opted for *kayu*, also because this variant appears in 8 different mss. whereas the 7 instances of *kayo* are found only in the mss. TT VIII H and L.[388] From *kayu* come

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literary or archaic language) and cf. *nece* ‘(in) what language’. *kač* has to be adnominal also in Turkish; a count word like *tane* is needed if one is not to use it adnominally.

[387] An instance in another runiform ms., TM 342 2v11 in KöktüTurf appears in fragmentary context, as the facs. shows better than the edition; it can hardly be interpreted as in EDPT 618b.

[388] *kaño* may still have been the original form and it cannot be excluded that we would have found that more frequently if there had been earlier Brāhmī sources; Schönig

kayunuŋ and *kayunï* (both attested e.g. in BT XIII 2,91), *kayuka* (BT XIII 38,30 and 21,67, Suv 375,21 and 22, 6 times in Abhi etc.) and *kañu+garu* (twice in ms. T I D 200 = Mz 774 last edited by Zieme in *AoF* VIII 242). *kañu+da* appears in U II 6,13 and 16; *kayuda* is common, e.g. DLT fol. 62 and TT VIII A 36 with *dh*, U II 29,11. The QB syncopates it to *kayda* to suit the metre; we also find e.g. *kayda barsar* 'wherever he goes' in SUK Mi33,3, a contract. *kayu+dïn* 'from where' is also common, e.g. in BT I D267; *kayutïn sïŋar* is parallel to *antïn sïŋar* in U II 29,19. *kayu+sï* sigifies 'which of them'.

I will deal with *kačanïŋ* in greater detail, because it has not yet been quite pinned down as to form or meaning, although attested a number of times in early texts. The word appears in the mentioned shape in the two Buddhist examples, *ačmak suvsamak ämgäkimiz kačanïŋ näŋ sönmäz* (Maitr 110v7) 'Our suffering through hunger and thirst never *ever* ends' and *kačanïŋ bolmazun* (Alex 15) 'May it never be!'. The three runiform examples in Tuñ have no vowels: *aŋaru sülämäsär* $k^1čn^2ŋ$ *ärsär ol bizni – xaganï alp ärmiš, aygučïsï bilgä ärmiš –* $k^1čn^1ŋ$ *ärsär ölürtäčik ök* (Tuñ 20-21) 'If (we) do not fight it (i.e. the Türk confederation) it will, *at some stage* – its ruler is said to be valiant and his advisors are said to be clever – it will definitely kill us *eventually*'. The Tuñ 29 instance of the term (with a formulation very close to Tuñ 20-21, also with *ärsär*) is spelled with n^2 as in Tuñ 20, which should, I think, be explained by the fronting influence of the /ï/ (as happens often in these inscriptions).[389] The four Manichæan examples have a single explicit vowel each; the third vowel is explicit in none of them but we can take it to have been /ï/ in view of the Maitr and Alex instances: *üzüti k(a)čan(ï)ŋ [y](a)vlak tö[rt] butlug tïnl(ï)g öziŋä [ymä] kul küŋ öziŋä t[u]g[mïš] ärsär ...* (ZiemeTexterg 2,33) 'If their souls should, *at some stage*, have been born in the body of an evil four-legged creature or the body of a male or female slave, ...';]L'R *barča kač(a)n(ï)ŋ*

1995: 180-181 takes this (with unrounding) to have been the source of *kaya* found in some modern languages.

[389] Reading Tuñ 20 and 29 as *kač näŋ* and explaining *'kačnaŋ'* in Tuñ 21 with secondary synharmonism would go well with the Manichæan examples but would leave the Maitr and Alex instances with *yod* unexplained. Tekin 1994 reads *kačan näŋ* in Tuñ 21 but retains *kač näŋ* in the other two places; this is unlikely in view of perfect parallelism between the passages. Possibly all three Tuñ instances should be read as *kačanäŋ*, especially if this is ultimately fused from *kačan näŋ* (attested e.g. in Maitr 11r11); the $n^1 \sim n^2$ variation would be explained by the /n/ standing between a back and a front vowel: Note that the only Tuñ instance of *näŋ* by itself (l.56) also appears with a positive, not a negative verb. The high vowel of *kačanïŋ* would be secondary.

kata[390] *bulgantï irinč boltülar* (M III nr. 1,IV v5) 'The [...]s all *so and so many times* felt terrible and became wretched'; *k(a)čan(ï)ŋ näŋ atn(ï)ŋ äšgäkn(i)ŋ muyuzï*[391] *örmäz* (M I 16,11) 'Horns never *ever* grow on horses or donkeys'; another instance of *kačan(a)ŋ näŋ* appears in M I 32,6 in fragmentary context. In the two last-mentioned instances the word is followed by *näŋ* to strengthen a negation, as in the Maitr instance.

In *nä törlüg aš ašamïšïn ... näčä yaš yašamïšïn öyür* 'He remembers what sorts of food he ate, ... how many years he lived, ...' (MaitrH XV 2r4) *nä* and *näčä* actually serve as relative pronouns, forming heads for object clauses; cf. also *yüz mïŋ tüman ulatï näčä küči yetmišinčä sözlözün* (TT V A 67) 'Let him say it a hundred, a thousand, ten thousand or as many times as he is able to'. The correlative constructions mentioned below and discussed in section 4.65 also use such pronouns as relative pronouns. *nä törlüg* 'what sort', *nä yaŋlïg* 'by what manner' and the like also appear, of course, in interrogative sentences and subordinated interrogative clauses.

The indefinite function of these 'interrogative' pronouns turns up in *nä ymä taštïn sïŋarkï bälgülärig nä ymä ičtin sïŋarkï [bälgülärig] adruk adruk tüllärig koduru kololasar* (MaitrH XI 3r29-30) 'if one meticulously examines whatever external and internal omens there are as well as the different dreams', where, in fact, the two *nä* are used as a correlative pair. In the following two instances *nä* is taken up by *barï* or *alku* 'all', giving a generalizing meaning. In *taglarï ï ïgač kaya kum barï kop basar* (M III 8,3-5), the possessive suffix of *taglarï* refers back to *kün tügsukdunkï yer suv* 'the territory in the east'; the sentence should signify '(any of) the mountains (of that territory), shrubs and trees, rocks and sand, all put pressure'. Further, *nä kärgäkin alku tükäti berip ... üntürdi* (KP 28,4) 'He fully gave him whatever he needed (= all he needed) and … sent him off'. *nä* is here attributive to *kärgäk*

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[390] With reference to this passage Gabain 1974: 100 spells the word as *'qačaŋ'* because the second vowel is not explicit and N looks like *alef*; this is, however, the only instance with this spelling.

[391] Spelled MWY'WZY, and the editor assumes that the *alef* is of the superfluous sort; the text does in fact have a few superfluous *alef*s. Reading *müynüz* or *muynuz* would, however, be just as possible and might be considered in view of the general Turkic account given e.g. in the EDPT. *müŋüz* in H I 55, DLT, Chagatay and modern Southeastern Turkic languages cannot be linked to the main Old Turkic variant within Old Turkic sound laws.

(note that 'whatever' is also derived from 'what') and the whole noun phrase is put into the accusative case.

We have indefinite *kim,* 'whoever', in *oglanïmïznï altačï kim ogrï ärsär anï tapalïm* (DKPAMPb 164), which signifies 'Whatever thief there is who robs our children, let us find him'. In Ht I 294 and 301, *kim m(ä)n* and *kim biz* appear to signify 'somebody like me' and 'people like us' respectively. *näčädä* signifies 'at some stage': *näčädä čayasene bayagutnuŋ iki oglanï bädük boltïlar, anïŋ arasïnta käntü özi ... adïn ažunka bardï* (U III 80,3-7) 'Eventually the two sons of the merchant Jayasena became grown ups (but) in the meantime he himself died and passed to a different existence'. *kačan* 'at some point' is used e.g. in *kačan ečisiniŋ [käl]mišin utgurak bilti, anta [ok...] käntkä bartï* (U III 86,18) 'At some point he got certain news that his elder brother had arrived, (so) he immediately went to the town (of Benares)'; a subordinative interpretation cannot be excluded, giving 'When he got certain news that his elder brother had arrived, he immediately went to the town (of Benares)'. *kač* is 'a few, a number of' in *kač bärä yer yorïsar* (Ht III 764) 'if one walks some miles'; *tut[gal]ï kač kün bolmadok* (BT XIII 4,4) 'It has been impossible to catch him for a number of days'; *kač kalïn toyïn egil kabïšïp* (PetInscr) '(we – eight proper names), quite a number of monks and lay people came together to ...'. Indefinite adnominal *kayu* 'any' can be found in BT II 257 or Heilk I 180.

Indefinite pronouns can also be used together with the conditional form. In the following example we know that this is the case, as the clause is parallel to a normal conditional clause: *alkïšïmïz ötügümüz täŋrikä arïgïn tägmädi ärsär, nä yerdä tüdïndï tutundï ärsär ...* (Xw 161-2) 'If our praise and prayer did not arrive to heavens in purity, if they got hampered and hindered anywhere …'. In *birök kayuda kačan yalaŋok ažunïnta tugmakï bolsar ymä, ...* 'even if, however, he should anywhere at any time get born in a human birth form ...' (U II 29, 11-12), the pronouns are also obviously indefinite. Otherwise, clauses where indefinite pronouns appear with the *-sAr* form are discussed in section 4.65, which deals with correlative relativisation, and in section 4.633, which is about temporal clauses.

Phrases consisting of interrogative-indefinite pronouns + *ärsär* whose pronominal reference is not taken up in correlative manner are used for stressing the generality of a statement: *ol saŋa nä ärsär kärgäki yok* (DKPAMPb 352) 'You don't have any sort of need for that'. With *kim*: *mini üčün ämgäntäči kim ärsär yok* (U IV C 152) 'There is nobody at all who would go to any trouble for me'; there is a further instance of

kim ärsär yok in TT X 70. In *burxanta adïn kimni ärsär umug ïnag tiläp bulmaz biz* (TT X 109-110) 'We have not found anybody except Buddha to serve us as hope and support, though we searched' the indefinite pronoun is in the accusative. It seems that this construction can even be used adnominally: Doubled and with topicalising *ärsär* we have e.g. *kayu kayu ärsär tïnlaglar* 'any living beings' (MaitrH XV 1v11). Numerous examples for interrogative-indefinites with *ärsär*, both adjacent and separate, in both adverbal and adnominal function, are quoted in UW 407-408 (part VII of the entry on *är*-).

The same generalising doubling as in the last quoted example is applied – without *ärsär* – also in *kim kim mä čam čarïm külmasunlar* 'let nobody whatsoever raise any objections' (SUK Sa10,12 and 11,14), the latter with *bol-up* after the particle *mä*);[392] cf. also *käntü käntü* 'each his own'. We have distributive doubling of nouns in *ažun ažunta* (SP 20 and DKPAMPb 282) 'in every existence'. Doubling in correlation between relative and demonstrative pronouns: *kaltï tïnlïglar kayu kayu yer suvda burxanlar yolïŋa kirgüsi bar ärsär bodisatvlar ymä ol ol yer suvda kirürlär* (Vimala 97-100) 'If, by chance, creatures in any particular place are to enter the road of the *buddhas*, the *bodhisattvas* as well go in at that particular place'.

nä ärsär also comes to signify 'any' (discussed in section 3.341); *näzä* 'thing', which e.g. appears four times in SUK Mi19, comes from this phrase.

kayu kayu remains interrogative in MaitrH XI 14r28: *kayu kayu bitig užak bo[šgun]galï sakïnur sän* signifies 'What alphabets do you think should be learned?'; it is followed by a listing of alphabet names and the speaker clearly expects the addressee to give the names of more than one alphabet.

In section 4.633 we quote temporal clauses starting with *nä* 'what' and containing the vowel converb followed by the postposition *birlä* or by *birlä ök*, or containing the *-(X)p* converb (sometimes also followed by *Ok*), or the *-sAr* form; they all convey the meaning that the main action follows immediately upon the subordinated one. The source of this construction is not clear. *-sAr* and the vowel converb + *birlä* are also used without *nä* in this meaning, but the *-(X)p* converb is not.

There is also an emphatic use of the interrogative-indefinite pronouns, as in *öŋrängücilär*[393] *kač yïlta tükäl bilü umazlar munuŋ tözin* (Ht VIII 43) 'Those who learn it are in so many years unable to know its central

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[392] This is akin to the doubling of *bir* for distributive meaning, and cf. *öŋi öŋi* 'various' in Pothi 235.

[393] From *ögrän*- with nasal assimilation, unless a simple error.

principle.' The exclamatory use of *nä* in *bo nä ämgäklig yer ärmiš!* 'What a place of suffering this turns out to be!' (KP 4,8) is akin to this; there are more examples in chapter V. Pronouns used in this way are neither referential nor indefinite, nor do they signal the request of an answer on the part of the speaker.

3.14. Numerals and quantification

Numerals are a morphological class by themselves, apart from being a lexical and syntactical class: The cardinal numerals serve as base for two forms not found with other word classes, the ordinals in *+(X)nč* and the distributives in *+(r)Ar*. The Old Turkic counting system is decimal; there is a periodicity based on ten (*on*). The digits and decades are opaque up to *älig* 'fifty', this latter being identical with the word for 'hand'. *altmiš* 'sixty' and *yetmiš* 'seventy' seem derived from *altï* 'six' and *yeti*[394] 'seven', though no appropriate suffix *'+mIš'* or *'+mXš'* is attested anywhere else. 'Eighty' and 'ninety' are 'eight tens' (*säkiz on*) and 'nine tens' (*tokuz on*); in the DLT these terms are fused to *säksön* and *tokson* respectively. The highest opaque numeral in common use is *tümän* 'ten thousand'.[395] The hundreds, thousands and ten thousands are expressed in multiplicative manner: '3700' is *üč bïŋ* (or *mïŋ* in Uygur) *yeti yüz*, '37000' *üč tümän yeti bïŋ* (or *mïŋ*).

The runiform inscriptions and the earlier Uygur texts form cardinals between the various decades from the second to the ninth one in anticipating fashion: First stated is the digit as starting the count from the lower decade, then the higher decade is mentioned: *tört kirk,* literally 'four forty' (MaitrH XV 10r11), e.g., is '34'. In E10,5, the defunct topic of the grave inscription is quoted stating his age as *säkiz tokuz on yašïm,* which signifies 'I am 88 years old', literally 'eight nine-ten my age': *tokuz on* '90' is mentioned above. This strategy may have existed also outside the decimal system: In MaitrH XV 14r4-26 we find the terms *iki yeti küntä ...*, *üčünč yeti küntä ...*, *törtünč yeti küntä ...*, *bešinč yeti küntä ...*, *altïnč yeti küntä ...* and *yetinč yeti küntä ...* signifying 'on the second / third / fourth / fifth / sixth and seventh of the seven days'[396] used similar to *bir otuz küntä ken* (13v23) 'after the 21st day'. In both cases the numeral serving as framework to the counting is

[394] Or *yete*, taking account of the optional vowel assimilation.

[395] Buddhist texts have names for much greater numbers, which are of Indian origin. *tümän* may actually also be a borrowed term (from Tokharian).

[396] And not, apparently, 'in the second, third ... week'. Ordinals are discussed further on in this section.

placed between the denumerating numeral and the head with no affix or other element to show its function in the construction.

The members of the tenth decade cannot be formed in this manner, as *altï yüz,* literally 'six hundred', would be '600' and not '96': These are constructed with *örki* from *ör-* 'to rise': *säkiz yüz altï örki* '896'. '103' is *yüz üč* (MaitrH XV 10v5) but '99' is *tokuz örki* (U 1426 r3 edited in Ehlers 1998). An instance expressing '99' as *yüzkä bir ägsük* i.e. 'one less than a hundred' is quoted in the note to that passage.

Still another means for adding digits to decades or decades to hundreds etc., found in all periods, is to state the higher unit first, then *artok+ï* 'its supplement' and then the lower unit, as *yüz artokï kïrk tümän* (Xw 12) '1 400 000' (literally 'hundred plus forty myriad(s)'), *otuz artokï bir yašïma* (BQ E28) 'when I was in my 31st year (i.e. when I was 30 years old)' or *tört yüz tokuz on artokï beš* '495' (literally 'four hundred(s) nine ten(s) plus five'. *beš yüz artokï äki otuzunč yïlka* (M I 12,15) 'in the year 522' and *iki müŋ iki yüz artokï beš kïrk* (MaitrH XXV 4r23) '2235' combine both methods: *äki otuz* '22' and *beš kïrk* '35' have the constructions mentioned above. *on artok yeti yïl* (Ht VII 163) '17 years' (with no possessive suffix on *art-ok*) is yet another possibility; classical and later texts can also leave *artok* away altogether, giving e.g. *älig bir* (DKPAMPb 85) '51'.

In Uygur *yarïm* is 'half', *iki yarïm* 'two and a half'. In Orkhon Turkic and in inscriptions of the Uygur Steppe Empire, *sïŋar* appears to have been 'half' or 'a part': *[sïŋ]ar süsi ävig barkïg yulgalï bardï, sïŋar süsi süŋüšgäli kälti* (BQ E 32) 'Half / Part of their army went to plunder (our) homes, half / a part came to fight (against us)'; *sïŋarï bodun ičikti, sïŋarï b[odun ...* (ŠU E 6-7) 'Half / Part of the people submitted, half / a part ...'.

Throughout Old Turkic from the Orkhon inscriptions till the very latest texts, *äki* / *iki* '2' has the shape *äkin* / *ikin* when governed by the postposition *ara* 'between'. Since postpositions govern the accusative form of stems with possessive suffixes, it appears that the second vowel of *äki* / *iki* was felt to be, or originally was, the possessive suffix (see section 4.21 for the construction). In that case, the first syllable may be **äk* 'addition, joint', a word attested in the Oguz languages (in Turkmen with a long vowel), and *äki* may originally have signified 'its addition'.

iki ülügi atlïg ärti, bir ülügi yadag ärti (Tuñ 4) is an example of how the early Turks expressed fractions, if (as usually translated) this

signifies ‘Two thirds (literally ‘two of its parts’) were mounted, one third (literally ‘one of its parts’) were on foot’.

Distributive numerals are formed with the suffix *+(r)Ar*, as *äkirär* / *ikirär* ‘2 each’. In compound numerals, only the first element gets the distributive suffix: *altïrar y(e)girmi* (Höllen 50) is ‘16 each’, *säkizär tümän* (MaitrH XXV 2r7) ‘80,000 each’, *bešär yüz ärin barïp* (KP 24,2) signifies ‘He had gone (there) every time with 500 men’ (not *‘beš yüzär’*). Note that the procedure is the same in the two examples, although ‘500’ is construed by multiplication, ‘16’ by addition. Distributives are normally found in adnominal function, as *onar ärkä* ‘for each 10 men’ (TT II,1 91) or *birär čïŋratgu* (KP 79,5) ‘(hang on them) a bell each’. *bir+är+kyä* ‘just one each’ (four times in Suv 532,19-21) is not surprising, since *+kyA* has pragmatic functions and is not just a diminutive (see sections 3.111 and 5.3). Doubled distributives are used adverbially, e.g.: *birär birär adakïn bap kämišip yüŋin kïrkarlar* (M III nr. 14 v 3) ‘One by one they bind their (i.e. the sheep’s) feet, throw them down and shear their wool’; *birär birär kölmiš* (Yosıpas 41) ‘He hobbled then one by one’. Simple *bir* can also be doubled to stress the fact of distribution: *bir bir ažunlarda* signifies ‘in every single existence’. This is akin to the doubling of *kayu* ‘which’ giving ‘whichever’ and *kim* ‘who’ giving ‘whoever’ (examples in section 3.134).

In two economical texts involving the same persons there is an aberrant phrase involving *ikirär*: *bo yerkä berim [a]lïm kälsä ikirär [ya]rïm bilšip [...] berür biz* and *alïm berim kälsä ik(i)rär t(ä)ŋ bilišip t(ä)ŋ berür biz* (SUK RH8,8 and RH11,10); this signifies ‘If taxes are demanded (of this land), we each detemine half (‘determine what is equal’ in the second contract) and give in equal parts’. What is meant is not ‘two (halves) each’ but ‘half each’.

Ordinals from ‘3’ on have the suffix *+(X)nč*; e.g. *törtünč* ‘4th’, *tokuzunč* ‘9th’. *tümäninč* ‘10000th’ is ‘last, used for self-depreciatory purposes’ (as pointed out by S. Tezcan in a review). However, cf. *törtinč* with /I/ in the suffix in ThS I a,1, a runiform ms., and *beš yüzinč* in a relatively early text, SP 13. *+(X)nč* may have been borrowed from Tokharian, where the ordinal suffix has a similar shape. *bir yegirminč* ‘eleventh’ appears several times in SUK. ‘second’ is *äki+nti* / *iki+nti*; this form could be linked to the adverbial suffix *+tI*, found e.g. also in *am+tï* ‘now’ (*am* is attested with this meaning in South Siberian). A lone variant *äkin* is found in ordinal use in BQ E32; this may represent the

base of *äkinti* if it is not an error. Adjectival 'first' is expressed by nominal derivates like *bašla-yu+kï* (expanded from the vowel converb of *baš+la-* 'to begin'), *baš+tïn+kï* 'which is at the head',[397] *ašnu+kï* (e.g. *äŋ ašnukï kün* 'the very first day' in MaitrH XV 13v29) < *ašnu* 'before, earlier' or *ilki*,[398] or (as in Xw 117 or Maitr 26A r11) by cardinal *bir*. Compound numerals involving 'one' can also use *bir* and not the other terms as ordinal: *bir otuz küntä ken* (MaitrH XV 13v23) is 'after the 21st day'.[399]

bašlayu itself is twice in Orkhon Turkic (KT E16 and 25 respectively) used for adverbial '(at) first': *kaŋïm xaganka bašlayu baz xaganïg balbal tikmiš* 'He is said to have, for my father the emperor, at first erected Baz kagan's memorial stone'; *bašlayu kïrkïz xaganïg balbal tikdim*. 'First I erected the Kïrkïz emperor as memorial stone.' Similarly *äŋ bašlayu tugdokda* (Suv 348,6-7) 'the very first time that he was born'. The Suv also has *bašlayu+ča* with the equative suffix. *iki+läyü* (e.g. in Suv 604,9) is 'again', i.e., literally, adverbial 'for the second time'. This form must be a similative in *+lAyU*, since a *+lA-* derivate from 'two' is not attested; in view of this, *bašlayu* might also be a similative signifying 'as head', although a verb *bašla-* does exist. Note, though, that there also is an adverb *ikilä* 'again' (e.g. in MaitrH X 1v4 and XV 12r3, Fedakâr 280 etc.). Cf., finally, *ikinti+läyü* in Suv 32,7, formed from the ordinal. The very common *bir ikintiškä* 'one another' (cf. sections 3.13 and 4.5) also clearly contains the word for 'second', but the °*š*° is hard to explain. It is unlikely to come from *+(s)I(n+)*, the 3rd person possessive suffix, as /si/ > /ši/ is a process well-known from a number of languages including Proto-Mongolic but not attested in Early Turkic; nor could one explain the lack of 'pronominal' /n/ at this stage of the language.[400] It may possibly have been adopted from the verbal cooperative-reciprocal suffix.

For reference to individuals in a group one adds the possessive suffix to the ordinal form. To express the content 'one of them', e.g., we have *biri* in a very early source: *olarka üč ötmäk [berd]im. ol biri yïlan*

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[397] In Fedakâr 189 (Sogdian script) *s]utar bitig* PŠD'YK *tägzinč* clearly signifies '*sūtra* text, first scroll'. The merely transliterated word is clearly also a derivate of *baš* but the editor's transcription as *bašd(ï)ŋ* is not certain.

[398] Formed from the base of *ilgärü* 'forward' with the suffix *+kI*; see section 3.126 for a discussion.

[399] Cf. German *einundzwanzigster* '21st' vs. *erster* '1st' and similar French *vingt-et-unième* vs. *premier*.

[400] *[bir ikinti]sikä* in Dispute 1 r 1 is a conjecture and even the s^2 is rather damaged.

tärkin [ka]pap yedi (DreiPrinz 46) 'I gave them (i.e. the 3 snakes) three loaves of bread. One of those snakes quickly snatched (them) and ate (them)'. In Buddhist and Qarakhanid texts the possessive suffix is twice added to the cardinal number, as *birisi* (e.g. in Ht VIII 29, U III 67,6$_1$, frequently in the QB); 'the other' is *ikintisi.* Thus we have e.g. *bo üčägüdä birisin birisin titgülük ïdalaguluk käzigi kälsär ...* (TT VB 107) 'If it is one's turn to give up these three one by one, ...'. This instance also shows how doubling is used iconically, to symbolise the one-by-one selection. A syncopated variant *birsi* appears as *birsi 1siŋä*,[401] signifying 'one by one', in BT VII A 234 (a tantric and therefore late text) and is also found in QB.

In DLT fol.602, *birin birin mïŋ bolur* signifies 'One by one becomes a thousand'; *bir* 'one' is here in the instrumental case. *bir+in bir+in* is used with this meaning also by Rabġūzī.

Adverbial multiplicatives are in Orkhon Turkic formed with *yolï,* e.g. *tört yolï* 'four times' in BQ E 30 (further examples in T.Tekin 2003: 133), *üč yolï* 'thrice' in M I 34,12 and Suv 131,16. In the Yenisey inscriptions they are formed with *kata*, e.g. *üč kata tägzinti* (E31,4) 'He toured (the area) thrice'; similarly E48,4 and (with the same verb) E53,2. Thus also in Uygur *kač kata* 'a number of times' in KP 23-24, *bo ämig iki kata okïyu tägintim* 'I endeavoured to recite this healant twice' in M I 29,14, *kač(a)n(ï)ŋ kata* 'often' in M III 7,5$_2$, nr. 1,IV v5. Similarly *yüz mïŋ kata* '100 000 times' in QB 3058, *kač kata* 'how many times' twice in the DLT. *yol+ï* 'its way' is denominal, *kat-a* a petrified converb from *kat-* 'to add'. For 'once' one generally uses the bare stem *bir*, but the DLT has *bir kata*. In Orkhon Turkic the bare stem of any numeral can be used in this way, e.g. *Elteriš xagan ... tavgačka yeti yegirmi süŋüšdi, kïtañka yeti süŋüšdi, oguzka beš süŋüšdi* (Tuñ 49) 'Elteriš kagan fought China 17 times, the Kitañ 7 times and the Oguz 5 times'. Cf. further *iki kata tamïrïm tokïp üčünč tokïyu umatïn tïna turur* (U III 37,35) 'My artery beats twice (but), being unable to beat the 3rd (time), stands still', with both multiplicative and ordinal. Ordinals are also combined with *kata*, as in *üčünč kata* 'for the 3rd time' (Suv 13,23) or *ikinti kata* 'for the 2nd time' (KöktüTurf p.1058, WilkKatMan nr. 582 r2-3). *birär kata* and *üčär kata* (Ht III 820 and 825) are 'once each' and 'thrice each'.

[401] There is a numeral in the ms..

Collectives in *+(A)gU* or *+AgU* (dealt with in OTWF section 2.52) are also often derived from numerals; e.g. *ikigü* or *ikägü* 'a pair'[402] or *beš+ägü* 'a group of five'. *birägü* is also attested, and signifies 'a set of one'. In the instrumental case these collectives are adverbial. They appear to have been pronominal (which they in a sense are also by content, since they stand for names of groups): They usually get the pronominal accusative suffix *+nI* also in relatively early texts, and in Orkhon Turkic they show pronominal *n* before possessive suffixes (section 3.121).

iki+z (DLT etc.) is 'twin'; this should be another instance of the plural element *+(X)z* found in e.g. the possessive suffix *+(X)m+Xz* 'our' or the pronoun *siz* 'you (plural)': The very common addition of the collective suffix *+AgU* to numerals is also, after all, not felt to be a redundancy. Note that *+AgU* forms denote the whole group, whereas *+(X)z* derivates from numerals (others being attested in Middle Turkic) can denote a single 'twin' etc..

The suffix *+gIl* forms names for geometrical figures with a certain number of sides, as *törtgil* 'square' (Suv 544,8, variant in 477,2; SUK WP3,3 and Mi28,4). The suffix may not be applicable to all numerals, if *üčgil törtgil säkiz kïrlïg altï yegirmi kïrlïg* (MaitrH XXV 4r17) refers to figures with 3, 4, 8 and 16 sides.

The postposition and adverb *öŋi* 'separate from, separately etc.' governs nominals in the locative or the ablative but numerals in the nominative; it then has a special meaning as in *kop kamag yalŋuklar üč öŋi bölär* (MaitrH XV 14r17) 'he divides all humans into three groups' or *yeti öŋi ätözlärin bïčïp* (MaitrH Y 211) 'dividing their bodies into seven pieces each'.

Words signifying 'all' are *kamag / kamïg / kamug* (this last attested in ManTürkFrag 161, SP 37 or ms. M 657 r1 and 3 quoted in the note to BT V 521),[403] *alku,*[404] *yomkï* and *tolp* (all three deverbal), *tüzü, kop* (a number of times in the different Orkhon inscriptions), *barča, barï* (both < *bar,* i.e. originally 'as much as there is' and 'what there is'[405]) and *yapa*.[406] Some of these get the collective suffix, as *kamagu,*[407]

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[402] Both forms appear to be attested well; cf. e.g. the index to SUK.

[403] Borrowed from Iranian and a cognate of Persian *hama*.

[404] This and *kop* are definitely not postpositions, as stated by Gabain 1974: 135, 142.

[405] DhāSū 24 has *alku barča* as binome. That *barča* should come from **bar-ïr+ča,* as written in Gabain 1941: 59, is, I think, unlikely for semantic reasons.

[406] Not in DTS or EDPT but used with this meaning eleven times in BT XIII 2, 5, 10, 21, 22, 27, 36, 50 and 54, sometimes in binomes with *kamïg, tüzü, barča* or *yomkï*.

yomkï+gu, tüzü+gü (Pothi 98 and 181) and *alku+gu*. *köp*, which is rather rare in Old Turkic, and *üküš* signify 'many, much'. A number of these words and also *+(A)gU* forms at a quite early stage show *+nI* (and not *+(X)g*) as accusative suffix, in accordance with their pronominal content. *amarï* 'a few, some' (also 'the others') is documented in UW 116-117. It is used both as a noun phrase by itself (both as *amarïlarï*, when referring to a set which is part of a larger set mentioned before, and as *amarï*) and adnominally as part of a noun phrase. In TT X 39 we find *amarïlarï* (and not *amarï*) used adnominally, in *amarïlarï tïnlïglar ... adïn ažunka bardïlar* 'Some creatures ... went to a different existence'.

Absolute measure words of Uygur are practically always borrowed. For length and distance we find *tsun* 'an inch', *čïg* 'a foot' or 'a cubit' (both < Chinese), *čigin* apparently also 'a foot' (in DKPAMPb 1345 and Maitr 75v8), *kulač* 'a fathom' and *berä* 'a mile'. For time we can mention *kšan* 'a very short moment' (<< Sanskrit). For weight there is 1 *yastuk* (the Turkic word for 'cushion', that being the weight's shape; cf. Persian *bāliš*, with the same two meanings. A *yastuk* consists of 50 *sïtïr* or *satïr* (<< Greek); 1 *sïtïr* consists of 10 *bakïr*. *batman* (= Chinese *jin*) is a large unit of weight. The smallest measure of capacity is *kav*, 10 *kav* being 1 *šiŋ* (< Chinese) and 10 *šiŋ* 1 *küri*. 10 *küri* 'bushel' give one *šïg*. *šïg* (< Chinese but already borrowed by Bactrian) or *tagar* is a measure of capacity, for grain among other things. Hence it also became a measure of arable land, based on the amount of seed required to sow it. The *tämbin* is a small unit for liquid measure; 3 *tämbin* are 1 *saba*, 10 *saba* 1 *kap* (the largest measure for liquids). Cf. Yamada 1971 and Matsui 2000. Measure words in a series can, of course, be joined; e.g. *keŋi [tör]t čïg bir tsun* (Ht III 976) 'Its width is four feet one inch'.

As pointed out by Moriyasu in several publications, the means of payment during the reign of the West Uygur kingdom was *quanpu*, an official and standard bale of cloth, replaced in Yuan times by *kümüš* 'silver' or *čaw*. During Yuan rule, trade was effected also by *böz* 'cotton cloth'.

For dates, the twelve animal cycle of years is used from the inscriptions of the Uygur Steppe Empire on, and till the latest texts. Months are numbered (*ikinti ay* etc.), but *čaxšapat ay* is used for the

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[407] This is not a 'Nebenform' of *kamag*, as A. v. Gabain wrote in the n. to TT IX 26, but haplologically simplified from **kamag+agu*. The base is known to have been copied from Iranian; no Iranistic or Turcological justification for such a 'Nebenform' is known to me.

last, *aram ay* for the first month. Days are numbered starting from the new moon (*yaŋï* 'new') as, e.g. *üč yaŋïka* 'on the 3rd day of the month'. This reckoning proves that the months were indeed moon months, as warranted also by their name (*ay* 'moon'); yet not all of them can have been pure moon months, as they did not wander through the seasons (as Islamic months do). Cf. in general Bazin 1991 for Old Turkic dating.

-(X)m is used for forming ad hoc units of measure: *yeti tut-um talkan* (TT VII 25,10) are 'seven handfuls of parched grain', *bir aš bïš-ïm+ï üd* (Ht) is 'the time it takes for food to get cooked', while *bir tamïz-ïm+ča+kya* (InscrOuig V 45) is 'just as little as a drop'.

3.2. *Verbs*

Verbs are a class of lexemes showing categories as listed in section 3.22 below; accordingly, elements such as *bar* 'there is' and *yok* 'there isn't' or *kärgäk* 'it is necessary' are not verbs though mostly used predicatively. The presence of verbs is not obligatory either in sentences or in subordinate clauses, if the predicate is not a content to be found in a verbal lexeme, and if no explicit verbal categories are to be expressed. If verbal categories are to be expressed although the predicate is a nominal, the language uses the verb *är-* 'to be' or some other member of the small group of copular verbs (see section 3.29).

3.21 Verb derivation

We distinguish between denominal derivation (which can also have lexemes of adjective-type content as base) and deverbal derivation; it happens only very rarely that one formative is used for both purposes. The derivation of verbs from pronouns, which exists in some Turkic languages, is not productive in Old Turkic. Verb stem formation will not be described here in any detail, as this has already been done in the OTWF (the formation of denominal verbs in part V, the formation of deverbal verbs in parts VI and VII of that work, which deals with derivation as well as with its various functions); moreover, most of word formation takes place in the lexicon and not in the grammar.

3.211. Denominal verb formation

In the denominal derivation of verbs, the most common formatives are *+lA-* and *+A-*, which form both transitive and intransitive verbs. *+U-, +(A)d-, +(X)k-, +(A)r-* and *+lAn-,* on the other hand, only form intransitives. Onomatopoeic and synesthetic intransitives can end in

+kIr-, °trI- or *°rA-*; the equally intransitive *+sIrA-* verbs are associated with *+sXz* and denote lack or loss. *+(X)rkA-* (*+kA-* with bisyllabic bases ending in consonants) forms transitive verbs expressing feelings, attitudes or opinions towards their object. The possibility that there existed a Ø derivation of verbs from nouns cannot be ruled out: Cf. *karï-* 'to grow old' no doubt related to *karï* 'old'.

3.212. Deverbal verb formation

Derivation of verbs from verbs usually serves the diathesis category, reported on in the next section. Desideratives and similatives, which describe 'types of inaction', can, on the other hand, be mentioned here: Verbs formed with *-(X)gsA-* denote the wish to carry out the action denoted by the base verb, while adding *-(X)msIn-* has the writer describe the subject's behaviour as mere pretense. The reader is referred to part VI of OTWF for details. An example for the latter formation (not mentioned in OTWF 531f.) appears in *tälgäli topolgalï umsïnmïš ol* (Ht VIII 372) 'He pretended to be able to penetrate it'; it is derived from the verb *u-* 'to be able to'.

3.22. Verbal categories

The Old Turkic category of voice and diathesis, which describes the mutual behaviour of the participants in the action and their task in it, has four major and two minor members. The category is expressed by a set of intercombinable suffixes placed after the stem but before the suffix of negation. These suffixes also serve the derivation of verbs from verbs (q.v. in section 3.212): Note that deverbal nominals such as *ävr-il-inč+siz, yar-ïl-ïnčïg, yölä-š-ür-üg, bälgür-t-mä* (all mentioned in the OTWF) also contain stems formed in this way. Vying and cooperation between two or more participants in the action is expressed by *-(X)š-*, an element which usually comes last in the chain of voice and diathesis suffixes. Passivity is expressed by *-(X)l-, -tXl-* or *-tUrXl-*. *-sXk-* verbs have actions taking place to the detriment of subjects, partly governing (in the accusative case) the entity lost by them. *-tXz-* verbs show their subjects to be responsible for activities of which they are the objects. Verbs formed with *-(X)n-, -lXn-* or the rarer *-(X)d-* and *-(X)k-*[408]

[408] Gabain 1974 § 160 (and already in the note to l. 1805 of her edition of parts of Ht VII) expressed the view that the meaning of this formative is 'intensive', mentioning the verbs *alk-* 'to use up, destroy etc.', '*ök-*' 'to think' and *könük-* 'to burn up'. The semantic relationship of the first with *al-* 'to take' is dubious, the second, quoted from U II 11,8, is a mistake for *(y)ük-* (**hük-*) 'to heap up' (what here appears is the

are reflexive, anti-transitive (i.e. intransitive derived from transitive) or middle. Verbs formed with *-Ur-, -Ar-, -gUr-, -tUr-, -Xz-*[409] or *-(X)t-* (*-(I)t-* in later Old Turkic), finally, are just transitive if their bases are intransitive but causative if the bases are transitive; however, *-(X)t-* derivates from transitive bases tend to be reversive, i.e. to get passive meaning. See section 4.5 for more details on the use of these suffixes.

If the base is a nominal clause, the opposition between intransitive and transitive is taken care of by the auxiliaries *är-* 'to be', *bol-* 'to become' and *kül-* 'to do': *balïg bašlïg kül-* (Maitr 78v1) 'to wound' is the transitive or causative counterpart of *balïg bašlïg bol-* (Xuast I 9) 'to get wounded', *adak asra kül-* 'to subdue' (Maitr 5r4) of *adak asra bol-* 'to be subdued' (Suv 313,1), *yok yodun kül-* 'to annihilate' of *yok yodun bol-* 'to be destroyed'.

The suffix of verbal <u>negation</u> is *-mA-*, whereas nouns can be negated through *yok* and *+sXz*; the latter denotes not only 'lack' but also – with adjectives – negation of the quality in question. We find *-mA-* in finite and non-finite verb forms but not in deverbal nouns. One exception is *-gUčI,* dealt with in section 3.113 as a formative for forming deverbal nominals although we (rarely) do have *-mA-gUčI*: Even *-mAgUčI* forms describe people by their permanent qualities.[410]

-mA- is generally applied in agglutinative manner, but there are quite a number of exceptions (cf. Grønbech 1955 and see Erdal 1979: 156 for historical development): The aorist and, in Orkhon Turkic, the future tense (discussed in sections 3.233 and 3.234 respectively) have irregular negative forms. The negative counterpart of *-mIš* is *-mAdOk,* with *-mAmIš* starting its appearance in not very early texts (rare even in Suv). *-mA-gU* is not attested in early texts either; it is rare in Suv but we do find it e.g in U III 54,13 or BT I D 273 and 320; the distribution of *-mAgUlXk* appears to be similar. Uygur *-(X)p, -(X)pAn* and the vowel converb have *-mAtIn* as their negative counterpart; this is presumably the instrumental of *-mAtI,* appearing in this same use in runiform inscriptions and Qarakhanid. Topicalised negation can be moved to an auxiliary, as in *täpränčsiz boltum ärmäz mü* (Suv 626,18) 'Have I not become immovable?' instead of **bolmatïm mu*.

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lexicalised noun *ükmäk* 'heap') and the third (from M I 17,12) should be a scribal error for the very common *küñ-ür-* 'to burn (tr.)'. OTWF 524-5 argues against the existence of Old Turkic suffixes consisting of vowels bearing 'intensive' meaning.

[409] Can in no way be related to *-Ur-*, as thought by some scholars, as the suffixes differ both in their vowels and their consonants.

[410] Only in the Suv text do we find *-gUčI* used as action noun (cf. section 3.282).

Verb stem compounding, well attested in some modern Turkic languages, is unknown in Old Turkic except for the use of *u-ma-* 'to be (un)able to' in part of the corpus (cf. section 3.252 below).

Several classes of auxiliaries are compounded with the vowel converb and with the converbs in *-(X)p* and *-gAlI* to express such categories as ability, actionality, politeness and the question whether the action is carried out for the benefit of the subject or for some other participants in the action. These categories and the means for expressing them are discussed in section 3.25.

There are five further verbal categories, tense-aspect (for which see section 3.26), status, mood and, together with finite verb phrases and (partly) with the conditional, the subject's person and number. Status and epistemic mood are the topic of section 3.27 while volitive mood and modality are dealt with in section 5.1; see section 3.231 for the forms of the volitional paradigm.

Most Old Turkic verb forms use pronouns for agentive person and number (at least in the first and second persons), but the constative preterite uses possessive suffixes (and apparently also the *-sXk* form as mentioned in section 3.26).[411] The volitional paradigm amalgamates person and number with the volitional marker; *-(A)lIm*, the 1st person plural hortative suffix, e.g., is opaque as to plurality. However, personal pronouns are by no means excluded from joining volitional forms: Cf. e.g. *siz* 'you (pl.)' added to the 2nd person plural imperative of *tiŋla-* in *bärü tiŋlaŋ siz* (HamTouHou 1, 1-2) 'Listen here!', said in politely addressing a single person.

One can also add *+lAr* to the 2nd and 3rd person plurals, and *+lAr* is also found optionally in the 3rd person plural of other forms (e.g. *öčäšmišlär* 'they are said to have argued' in a runiform ms. or *külmišlär* 'they are said to have laughed' in Yosıpas 18). Instances like *alku tïnlïglar bo ... kišig sävär taplayur ayayur agïrlayurlar* (TT V A 113) 'all creatures love and honour this person', where four verb forms share the suffix, or the sentence *yer suvlar suv üzäki kemi osoglug altï törlüg täpräyür kamšayurlar* 'The continents shake and rock six ways, like a ship on water' (MaitrH XX 1r2) might suggest that it comes from the

[411] In a contract published in Usp 24 there appears to be an instance of the 2nd person possessive suffix added to the form in *-dAčI*: *bolmasa sän kurug kaltačïŋ* ‚Otherwise you will lose all'. At some stage in Middle Turkic the conditional also acquired possessive suffixes referring to agents.

plural demonstrative pronoun *olar*. This is a possibility, especially in view of the fact that *ol*, the singular counterpart of *olar*, is often used as a copula, without demonstrative content. The fact that *+lAr* is shared between more than one word does not, however, make this idea more likely, as case suffixes, for instance, can also be shared. Since the quoted forms are participles in predicative use, one might think that what we have here is the participle (which is, after all, a nominal form) in the plural. Note, however, that Uygur also has *-zUnlAr* (e.g. in M I 29,16 and 30,18) and *-dIlAr* for the 3rd person plural of the imperative and the preterite respectively (beside *-zUn* and *-dI*, which can also be used with a plural subject), although these are not nominal; these prove that *+lAr* has become a plural marker for the verb as well. Another possible explanation for these forms is that verbal *-lAr* started from the participles and reached the truly finite forms by analogy.

In none of these paradigms does Old Turkic show the distinction inclusive / unmarked, known from some modern Turkic languages.

The expression of person and number is not obligatory in early texts, e.g. with *sülämäsär* in *aŋaru sülämäsär kačanïŋ ärsär ol bizni – xaganï alp ärmiš, aygučïsï bilgä ärmiš – kačanïŋ ärsär ölürtäčik ök* (Tuñ 20-21) 'If (we) do not fight it (i.e. the Türk confederation) *it* will, at some stage – its ruler is said to be valiant and his advisors are said to be clever – at some stage (it) will definitely kill us'; reference to the confederation involved has also to be supplied from the context, and the writer may have meant that reference to be understood as a plurality: I refer to "the Türk confederation" only in order to adapt my translation to the Old Turkic text. Outside Orkhon Turkic, subject plurality is very often expressed explicitly even when it also follows from the context, but not where a plural subject is adjacent: Cf. *yäklär kälir* 'The demons come' and *tanmïš üzütlär tašïkar* 'The rejected souls come' (M II 11,10 and 13). This holds also when the subjects are human, e.g. *bolar mini bilmäz* 'They wouldn't recognise me' (TT X 473-4), referring to Brahmans. In *kamag kara bodun yïgïlïp bir ikintiškä ïnča tep teštilär* (DKPAMPb 159) 'All the common people assembled and told each other the following' the plurality of the subject is lexical but not morphological, while verbal plurality is expressed both by plural and by cooperative-reciprocal morphology. The plurality expressed in *tetiglär ... bošgunsarlar tüŋlasarlar üküšin bilü umazlar* (Ht VIII 155) '(Even) the clever ones cannot understand most of it when they study it or listen to it' is verbal and not nominal, as the plurality expressed is that of the verbs' subjects; the plural verb forms do not refer to any plurality of entities as participles would.

There are no plural verb forms in runiform inscriptions, but no difference between Manichæan and other Uygur texts in the use of *+lAr* with verbs is apparent. In Manichæan sources we find such examples: *barča kišilär ïnča tiläyürlär* 'All people wish this' (M III 23,30), *ärksinür elänürlär eliglär xanlar* 'They govern and rule, the kings and rulers' (M III nr. 8 II r 8-9); *bo savka ymä kamgan külmišlär, yosïpas(ï)g ögmišlär, ïnča temišlär* (M III nr. 14 r 1-2) 'They all laughed at this matter, praised Aesop and said the following:'; *ol üdkä k(a)mag t(ä)ŋrilär m(ä)ŋigü ögrünčülüg s(ä)vinčlig bolgaylar* (M I 11,6-8) 'Then all the gods will forever be happy'; *k(a)ltï mani burxan amarï burxanlar vrištilär [...] bo ä[...] kälsärlär* (M I 24,7) 'When the prophet Mani and the other prophets and angels come (to …)'; *ölürgäli elitsärlär* (M III nr. 14 v 1) 'When they lead it to death …'; *sizlär anï üčün okïtmïš boltuŋuzlar* (M III nr.7 III r 5) 'You have been called[412] for that reason'; *turuŋlar kamug bäglär kadašlar* (M II 9,4) 'Stand up, all lords and brothers!'. The instance from M III nr. 8 quoted above as well as *ögürdi sävintilär* in SP 39 or *ičmäŋ yemäŋlär* in WilkKatMan nr. 65 B 1 show that the juncture between verb forms and this suffix was a rather loose one, as we have pairs of verb forms (aorist, constative preterite and volitional in the mentioned instances) sharing a single plural suffix.

Grönbech 1936: 72 (quoting Buddhist examples for *+lAr* with the finite verb) states that such plural verb forms are used only when the subject is a living being. This appears to be generally true but there are exceptions; here is a Manichæan one: *ičtin sïŋar üküš ärürlär küčlüglär köŋülär*[413] *biliglär sakïnčlar kim čokrayurlar kamšayurlar; ančula mäŋizlig ärürlär kaltï ulug taloy samudrï* (M III nr. 4 r 14) 'Inside there are numerous forceful ones, attitudes, impressions and thoughts which are bubbling and stirring; they look like the great ocean'.

3.23. Finite verb forms

The Old Turkic finite verb differs from infinite verb forms in that it normally expresses the person and the number of its subject(s), in that its typical task is to serve as a sentence predicate; it cannot, on the other hand, be used adnominally or adverbially. The person–number category has six members, three in the singular and three in the plural. The category can be said to be optional with finite verb forms as well, since

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[412] *okï-t-mïš* refers to the object of the verb, as *-(X)t-* derivates from transitive verbs often do.

[413] This is not an error, as double /l/ is often simplified.

a verb form in the 3rd person may in fact not be coupled with any reference to a subject; the content then corresponds to English 'one' as subject. The verb is in the plural also if there is only a single subject in the nominative, in case there is another one in the instrumental case form; e.g. *xaganïmïn sü eltdimiz* (Tuñ 53) 'I went on campaigning together with my khan': There is a similar rule also in some other languages such as Turkish and Russian. Old Turkic has no distinction between an inclusive and a neutral 1st person plural (i.e. sensitivity to whether any third party is included in the reference to the 1st person plural beside the speaker and the addressee) which we find elsewhere.

In Orkhon Turkic only the verb forms of the volitional paradigm have a true person-number conjugation; the mood suffixes are amalgamated with person and number and do not fall into one morphological slot together with the indicative tense-aspect or the participle and converb suffixes. Still, the early Turks did not conceive of indicative verbal content only in nominal terms: There is nothing nominal about the purely predicative future in *-gAy* as documented in the sources, and indirective *-mIš* cannot (or no longer can) be equated with the verbal noun of the same shape.[414] Imperfective aspect, the one dominating the present-tense domain, *is* exclusively participial; thus especially the aorist. Note that the participles in *-(X)gmA* and *-(X)glI* (and *-gAn*, wherever it appears) are never found in fully predicative use; nevertheless the participial and the finite uses of the *-Ur* form cannot be considered to be mere homonyms, as they are too similar in content. The Orkhon Turkic *-dAčI* future also originates in a present participle attested as such in Uygur and living on in Western Turkic; in Orkhon Turkic it moved into the future tense (in fact only into the positive future, as the negative future form is different) as a result of 'present renewal'.

The forms of the constative preterite *-d+*, the only indicative verb forms to express person by morphological means, use the possessive personal suffixes to refer to the subject. This can be explained as originally expressing the 'possession of an act'; the paradigm may have survived from an older system in which verbal morphology only characterised aspect, the use of the possessive paradigm serving as an anteriority marker (as in Yakut; cf. Republican Turkish *(y)dIm* etc.). In section 3.232 we quote a Maitr instance where the form is governed by a postposition, i.e. in fact appears in nominal use. The Orkhon

[414] Prehistorically, *-gAy* may have contained the suffix *-gA* forming deverbal nouns; see sections 3.112 and 3.234. Besides, *-gAy* is not attested in Orkhon Turkic; that may indeed be said to be largely nominal in the functioning of its indicative verbal system, as Classical Mongolian was.

inscriptions also have the *-sXk* form with the possessive suffix *+Xŋ* referring to the addressee as subject. It expresses the speaker's opinion that a certain event will needs follow automatically from deeds being carried out by the addressee; the message that there will be no escape from the results may have been behind a use of a suffix implying perfective aspect.

Verbal nominals used as perfect or projection participles also use possessive endings to refer to the subject, while person is expressed by pronouns with all other predicative verb forms (including the future form in *-gAy,* which is not a participle). Converbs are not followed by personal suffixes, but converbal phrases consisting of participles governed by postpositions sometimes are. All verb forms used as predicates of main clauses, and the conditional form *-sAr*, can in Uygur get the suffix *+lAr* to show that the subject is in the plural, e.g. in the analytical phrase *kučmazlar mu ärdi* 'weren't they wont to embrace? (DKPAMPb 608). Sentences such as *män öyür män* (HamTouHou 1, 2) 'I remember' or *bän ančа ter män* 'I say as follows' already in Tuñ 37 show that previous mention of the subject did not cause its deletion in the verb phrase. In 3rd persons we often find the pronoun *ol*, even when there is an explicit subject. The fact that, in the Tuñ example quoted, the independent pronoun is *bän* but the clitic one *män* and that the 3rd person plural adds *+lAr* directly to the verb form speaks for referring to forms with the clitic paradigm as finite as well. To this we can add the clitic *miz*, which is added in Qarakhanid Turkic to verb forms instead of *biz*: *biz barmas miz* (DLT fol.301); *kïlur miz* (QB 4904), *ursa miz* (QB 4016). The explanation for this is not, of course, phonetic but analogy from *män*.

Reference to the subject could usually be gathered from the context when the sentence itself did not supply it; if this was not the case either, the sentence was understood to hold for any subject, what is sometimes called 'impersonal'.

3.231. The volitional paradigm

This was the only paradigm clearly finite already in Proto-Turkic: The other predicative forms including the preterite (discussed in the next section) appear to have been built around participles. Here are the volitional[415] forms:

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[415] I use this term (< Lat. *uolo* 'I want') instead of the more usual 'imperative' because the 1st person sg. cannot be said to give orders. The others are also used for a much wider array of interactional contents than the term 'imperative' would suggest.

	singular	plural
1st person	-(A)yIn	-(A)lIm
2nd person	Ø, -(X)ŋ	-(X)ŋ, -(X)ŋlAr
3rd person	-zUn	-zUn, -zUnlAr

Examples: *tašïk-ayïn, yorï-yïn, yaz-ma-yïn*; *buz-ma artat-ma ... ač to-gïl*[416] (MaitrH XV 13v11-13), *tur-ma* (DKPAMPb 889); *sïn-alïm* ‚let us test' (Wettkampf 42), *kavïš-alïm; tašïk-ïŋ, äšid-iŋlär* (MaitrH XXV 3r17) ‚listen (pl.)!'. The 1st person singular suffix is often spelled as *-(A)yn* in Manichæan and other texts, but Zieme (note to BT V 362) doubts that this has any phonetic significance. Variants of the shapes *-AyI* and *-Ay* are used in the QB when needed for the sake of rhyme or metre; see Hacıeminoğlu 1996: 190 for examples of *-AyI*.[417]

The 3rd person 'imperative' has several variants. In a runiform letter ms. (UigBrief B v) we find the form *berzün* spelled with a diacritical mark over the Z, suggesting a pronunciation *-žUn*. Since such diacritics are known only in the runiform mss., this indication at pronouncing the sibilant may actually be old. It accords with the form *bol-čun* which we find in Orkhon Turkic, in KT E 11 and BQ E10, appearing in opposition to *bolmazun*: [ž] is the voiced counterpart of [č], and d^1/d^2 are in Orkhon Turkic replaced at the beginning of several suffixes by t^1/t^2, their voiceless counterparts, when the stem ends in /r l/. The grapheme choice between T and D has been taken to reflect an opposition between a voiced stop and a voiced fricative (see section 2.409); however, such a distinction could not lie behind the alternation č : ž if the diacritic which we find here is taken at face value.

In Qarakhanid sources, the 3rd person imperative always has /s/ instead of /z/, and around half of the Brāhmī instances are not *-zUn* but *-sUn*. Cf. also *mini atayu yarlïkasunlar* (M I 30,18) 'May they graciously evoke my name' in a late addition to a Manichæan ms.. In the fragments in Sogdian script (Fedakâr) we find a suffix variant *-zUnI* in *artamazunï* (205), *tavranzunï* (350) and *bolzunï* (392), all in fragmentary context. This variant is well attested in the QB as *-sUnI* where demanded by rhyme or metre.[418] The QB also has many examples of a variant *-sU*, which one might want to link with the form *-zU* in *täŋri yarlïkazu* found in Tuñ 53 and KT E29. QB examples for

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[416] *gIl* is a particle discussed in section 3.344.

[417] Hacıeminoğlu is misleading concerning *-Ay*; it occurs in QB 560 (B against AC), 1033 (BC), 3186 (C against B) and 4172 (BC against A) and thus does seem to be real.

[418] Another feature shared by the Sogdian script mss. ('Argu') and the QB (as well as Early Ottoman) are fused inability forms like *al-u-ma-dï* 'he was unable to take'.

-sU and *-sUnI* are listed in Hacıeminoğlu 1996: 192. It is unclear, however, whether the suffix appearing in these inscriptional passages is a variant of *-zUn*: The KT passage has a parallel in the BQ inscription, which has *yarlïkadok üčün* instead of *yarlïkazu*. An imperative would, indeed, not be appropriate in the Tuñ or the KT contexts, as both refer to the past. This makes it likely that *-zU* is an otherwise unattested archaic suffix with converb function. Finally, two parallel instances of a variant *-zUnIn* in a Manichæan passage: *yarok täŋrilär yarlïkazunïn yavašïm birlä yakïšïpan adrïlmalïm küčlüg prištilär küč berzünin*[419] *közi karam birlä k[ör]üšüp[än] külüšügin oloralïm* 'May the bright gods permit it and let my gentle one and me be united never to get separated (again); may the powerful angels give us strength and may my black-eyed one meet and sit together laughing.' (M II 8,16-9,18). I take the forms to represent a blend between the imperative suffix and an instrumental form like *anïn* 'thereby'; the same process can be observed with the form *-(X)pAnXn*. What lies behind this is a blend between two constructions: The realisation of the wish expressed by the imperative will make the union possible; in Turkish this could also be expressed by two volitional forms, in a sentence such as *Tanrı izin versin de artık ayrılmıyalım*. The resultative content of *dA* in the Turkish sentence (as of *fa* in Arabic) would have been expressed by this addition of an instrumental suffix to imperatives, a wish expressing a condition.

I have spelled the 1st person plural (hortative) suffix as *-(A)lIm* with *I* and not *X* in the second syllable as I do not recall having seen it with a rounded vowel; the shape of the suffix in *unït-alam* (M I 11,19) does not necessarily speak for /X/ either. However, I am unable to adduce instances where it is added to verb stems ending in rounded vowels (of which there are more than 30). *-(A)lIm* is the only hortative form of Old Turkic, but the Middle Turkic Qişaşu 'l-Anbiyā has *-AlI* and *-AlIŋ* (for exclusive vs. inclusive or dual vs. plural meaning respectively). In view of modern evidence for these forms, it seems possible for *-(A)lIm* to have been secondary and Proto-Turkic to have had **-(A)lI*.[420]

In some texts, *-(X)ŋ* is exclusively used for polite address to the singular, *-(X)ŋlAr* for plural addressees, e.g. *barïŋlar ... tiläŋlär istäŋlär*

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[419] Transcribed as *bir'ög* by Le Coq, who adds: "Lies *birüng*?". I have accepted the reading proposed by Zieme 1969:119, which the facs. shows to be at least possible. Arat, who reedited the poem as ETŞ 4, tacitly writes *yarlıkazın* (thus!) and *birzün*.

[420] In QB 4975 ms. B has *kirälin* against *kirälim* of AC, in 5964 *baralïŋ* in A against *baralïm* in BC, in 3489 *baralï* in A again against *baralïm* in BC, all three in dual and not plural use. The A ms. is quite late. Cf. also Ata 2002: 79-80 for Harezm Turkic usage.

'go ... search' used by Herodes to address the three Magi in U I 5-6, or *uruŋlar* used in answer to *uralïm* in BT I B 11; in others, *-(X)ŋ* is also used for addressing more than one person. The Orkhon inscriptions have neither *-(X)ŋlAr* nor *-zUnlAr* but use *-(X)ŋ* and *-zUn* for the plural as well. DLT fol.289 quotes a verse with the 2nd person plural imperative forms *koymaŋïz* and *kïymaŋïz* corresponding to what would in his language be *kodmaŋlar* and *kïdmaŋlar*, saying that this is how the Oguz and the Kïpčak tribes form this imperative. The forms, in use in Oguz languages to this day, are constructed in analogy with the plural of personal pronouns and possessive suffixes, whereas the *+lAr* of other Turkic languages comes from nominal inflexion.

In M I 9,11-14 (cf. also Zieme 1969: 152) we find a cursing suffix: *bir äkintikä karganurlar alkanurlar takï ... okïšurlar "yok yodun boluŋur ... otkä örtänkä töpön tüšüŋür ..." tep sögüšürlär* 'They curse each other and shout at each other, abusing each other by saying "Get destroyed! Fall into fire and flames with your head downwards!"'. I found such a suffix to be still in use as *-gUr* in Uzbek, Bashkir and Khalaj, where it can be added to the 2nd person singular; in our examples, *-gUr* appears to have been contracted with the plural imperative suffix *-(X)ŋ* to give *-(X)ŋUr*, similar to the contraction of the dative suffix with the 2nd person possessive endings.

The use of all these forms is discussed in section 5.1 of this work; the suffix *-zUn* appears also in final clauses (section 4.636).

3.232. Forms expressing anteriority

There are three verb forms which can refer to anteriority: The constative preterite, the indirective and (in Buddhist Uygur sources) the vivid past.

The constative preterite:

	singular	plural	
1st person	-dXm	-dXmXz	
2nd person	-dXŋ ~ -dXg	-dXŋXz ~ -dXgXz,	-dXŋXzlAr
3rd person	-dI	-dI(lAr)	

This paradigm can be described as *-d* (with certain bases, our sources actually spell the suffix with T, a fact to which we come back below)

followed by the 'possessive' suffixes (here described in section 3.122). These suffixes commonly refer to the verb's subject when affixed to perfect or projection participles such as the ones in *-mIš, -dOk* and *-sXk* (cf. sections 3.283 and 3.284). This has given scholars since Bang 1923: 129 the idea that the alveolar part of the constative preterite suffix might originally have been that of a verbal noun; cf. also the apparently finite (and at any rate predicative) *-sXk+Xŋ* form quoted below from the Orkhon inscriptions. However, while there is a deverbal noun form in *-(U)t* (discussed in OTWF section 3.108) there is none with a /d/.[421] Still, in MaitrH XI 15r4 we find[422] the phrase *savlarag (y)arutdumuz tamdurtumuz üčün* by the editors translated as "Weil wir die Worte ... erhellten (Hend.)(?)". Here, two *-d+XmXz* forms are governed by a postposition and must therefore be nominal (as *yarot-dok-umuz* would be). While, therefore, there appears not to have been any derivate with a /d/, there may have been a participle with this consonant in inflexional morphology, if this single example (giving us two forms) is not an error; see also OTWF 316.

Orkhon Turkic spells the suffix with -t[1]/t[2] when the stem ends in /l n r/ (with the exception of *bar-*, which came from **barï-* as shown by its aorist form), and with -d[1]/d[2] otherwise: See examples in Tekin 1968: 189-190. Later texts do not always keep this rule; cf. twice *turdï* in IrqB XV, a runiform manuscript. Johanson 1979 has made likely that spelling the suffix with t[1]/t[2] after /l n r/ would reflect the fact that the consonant was, in that position, a stop (though voiced or weak); see section 2.409. Whether what was spelled as *turdï* in the IrqB instances should indeed be read with [δ] remains an open question.

The 2nd person variants with /g/ are found especially in the Orkhon inscriptions, e.g. *öl-tüg* 'you died' in KT S6. In the 2nd person plural Orkhon Turkic may have had only *-dXgXz*, with forms such as *bardïgïz* and *ärtigiz* in the KT inscription.[423] While the ending *-dI* is found to be

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[421] Gabain 1974 § 106 assumes such a suffix, for which she gives three examples: *yïd* 'smell' which she links with *yïpar* 'perfume', *tod* 'full' which she relates to *tol-* 'to fill (intr.)' and *kid* 'behind', which is supposed to be related to *kin* with the same meaning. The first is impossible because there is no suffix *'-par'*, the second because there is no such adjective as *tod* 'full' but only a verb stem of this shape and the third because there is *ke+din* 'behind' (formed with a suffix dealt with above, from **ke*) but no '*ked* / *kid'*.The note to HtsBriefe 1857 has some further 'instances', for which see OTWF note 351 (and Röhrborn's note to Ht VIII 939 for *küzäd*).

[422] Cf. the facsimile; the passage is missing in the parallel Sängim ms.

[423] See section 3.122 for variation in the 2nd person plural possessive suffix in general. In Uygur and Qarakhanid there is the phenomenon that /ŋ/ is sometimes spelled with K and not NK; this is merely a matter of spelling, however, as the front K is used in words

used from the earliest texts on also with plural subjects, we find *-dIlAr* at least with human plural subjects, in not very late texts such as Ht: e.g. Ht VIII 56-73, where three teachers, alternatively referred to as *üčägü*, as *bo ačarïlar* or as *[bo] üč ačarïlar*, are associated with actions referred to as *tutmïš ärdilär, käd boltïlar, yörüg kïltïlar* and *yaddïlar*. The 2nd person plural can also add *+lAr*, e.g. in *küzädmädiŋizlär* (MaitrH XXI p.33 r6). *-mAdXŋXz* itself is used for the polite singular as well; this explains why there is no *+lAr* variant in the 1st person plural.

Verb forms expressing perfect and/or indirective content show the suffix *-mIš*; in the Orkhon inscriptions, this suffix is always spelled with s[2], which makes T.Tekin 1968 believe that it was pronounced with /s/ by the speakers of those texts. This might be a merely graphic matter, as there is no indication in modern or Middle Turkic languages for such a variant; see section 2.35 above for some remarks concerning the sibilants in the runiform script. This is also the impression we get from the instances of *-mIs* which we find in the Manichæan corpus: Two, in M I 6,6-8 and 7,14, appear in a text which does not at all use the Manichæan letter Š (which bears no similarity to the letter S, unlike the similarity between S and Š in normal Uygur writing) thus making no distinction between /s/ and /š/ in numerous words. The same is true for M III 6 II and III where, beside a number of instances of *-mIs,* we also find a number of other cases of /š/ written as S. Indirectivity is dealt with in section 3.27.

-mIš and *-dOk* are suppletive as to negation: The negative counterpart of *-mIš* is *-mAdOk* also when used for expressing indirective anteriority; e.g. *amru bušanu saknu olormïš. kaŋï xan ögi katun ... oglïŋa näčä aytsar näŋ kiginč bermädök* 'He is said to have sat there, worrying all the time. However often his parents asked him, he reportedly never gave an answer' (ChristManManus, Manichæan fragment v11). The fused sequence *-mIš+kA* is, however, negated as *-mAyOk+kA*. *-mAmIš* first turns up in the latest Old Turkic sources. The suffix *-dOk* apparently had a low vowel, to judge by the form *ärtmädök* attested in TT VIII G 50 in fragmentary context though clearly visible. On the other hand, however, we find *bar-ma-duk+ug* in TT VIII A 1. There is no real evidence in Old Turkic for positive *-dOk* used otherwise than as a verbal nominal or in participial function, although Kāšġarī fol.298-

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with back vowels as well. *bardïŋïz* is quoted in Doerfer 1993:1 from Ongin (R4) as a feature distinguishing the dialect of that inscription from that of KT, but the last syllable may (according to the Thomsen – Wulff material) not be visible; i.e. this may be a singular form.

299 does supply us with such evidence from the dialects of "most of the Oguz and some of the Suvars and Kipchak" (quoted in Tekin 1997: 7). Tekin 1997: 6 quotes "*äbkä tägdöküm* 'I arrived in the camp'" from Ongin R 2 but what can be seen there (and could be seen when the inscription was discovered) is only *tägd[ök]üm*. He also states that Volga Bolgarian and Danube Bolgarian had finite (positive) *-dOk*, but that is disproven in Erdal 1993: 76-80 and 1988 respectively. Since there is nothing else, we have to state that Old Turkic has *-dOk* as finite verb only if negated, although that may have been different in Proto-Turkic.

The suffix *-yOk* expressing the vivid past presumably had a low vowel and not /U/, because it is spelled thus in TT VIII H 50 and L 18 and 21; cf. however *bulganyu[k]* in TT VIII O 9. In this function it appears only in Buddhist texts; in the 3rd person this always gets the pronoun *ol* added to it. There are no runiform examples of *-yOk*; in Manichæan sources it is attested only as participle (section 3.283) and only in six instances (most of them in the late Pothi book). Its function is discussed in section 3.26; D.M. Nasilov (1966) has dealt with this suffix, giving numerous Uygur examples and discussing its survival in modern languages in Siberia; N. Demir recently showed that it survives also in southern Anatolian dialects.

3.233. The aorist

The so-called aorist,[424] whose form is used also as participle (section 3.282), usually expresses continuous aspect. The suffix of the positive aorist has the allomorph *-yUr* with stems ending in vowels;[425] *-r* is also found with these stems, though less often than *-yUr* in Old Turkic proper. *-yUr* is not necessarily the older form (a view expressed by Johanson 1976: 143-4 and Doerfer 1993: 30), although it did not survive very well into Middle and Modern Turkic; it could quite well be the newer one: *-r* is more often found in the early attestation of common forms such as *te-r* 'says' (the only form in Orkhon Turkic, with 9 instances in Tuñ, 3 in KT, 3 in the Ongin inscription; very common in the IrqB, TT I 44, Maitr 51 v10, 4 times in TT VIII E etc.) or *yarlïka-r* 'orders; deigns to' (M III 35,14, TT X 99, more than 30 times in Maitr etc.), *tokï-r* 'hits' (Maitr 110 r10 and 15), *oyna-r* 'plays, dances' (Maitr 140 r5), *yorï-r* 'walks' (Maitr 89 r17, 173 r7 and 25), *ogša-r* (Ht III

[424] I use this traditional term because the many variants of the form, *-Ar, -Ir, -Ur, -yUr* and *-r*, make it inconvenient to refer to this morpheme in archphonemic manner.

[425] We find *ogša-yïr* in ZiemeWind 50.

212) and so forth. The Brāhmī texts of TT VIII alone have *telä-r, arï-r, kurï-r, kogša-r, savïkla-r, akla-r, titrä-r, udïkla-r* and *yarsï-r*.[426] The probable direct connection between *-mAz* (discussed below) and *-r* also speaks for the greater antiquity of *-r*. *-yUr* might possibly be the result of syncopation from *-yU är-ür*; see section 3.251 for the joining of vowel converbs with *är-* to express durativity.

After consonants the aorist suffix has the alternants *-Ur, -Ir* and *-Ar,* alternating according to whether the stem is simple or derived and, if the latter, with what formative (cf. also section 2.51). The alternations accord with the vowels in the vowel converb *-U*, *-I* and *-A* and may reflect a prehistorical grammatical category. Most simple (single or double syllable) stems have *-Ar* but a few have *-Ur* and some other few (like *täg-*) have *-Ir*. Intransitive derived stems such as the ones formed with *-(X)k-, +(X)k-,* (onomatopoeic) *+kIr-* etc. have *-Ar*, passive, reflexive and cooperative-reciprocal stems and stems with the causative suffixes other than *-(X)t-* have *-Ur*. Stems derived with *-(X)t-* have *-Ir* in early texts; in later texts this becomes *-(I)t-* while its converb and aorist vowel changes to /U/. *ögir-* 'to rejoice' has /A/ as converb and aorist suffix in (early) Manichæan texts but usually /U/ in others: The change may have come about in analogy to its synonym *sävin-*, with which *ögir-* is often used in a biverb; such analogy often happened in biverbs. On Old Turkic converb and aorist vowels cf. Erdal 1979b and 1986.

The negative aorist suffix is *-mAz* which is, like its positive counterpart, followed by pronouns referring to the subject. One might analyse this as *-mA-z*, taking *-z* to be another allomorph of *-yUr* etc.; this seems to be a viable idea, since the conditioning between the other allomorphs is not purely phonological either, but is also based on the morphological profile of the base. One could even make a genetic connection between *-r* and *-z*, since an alternation /r/ ~ /z/ appears also in other domains of the grammar (discussed above in section 2.36). In modern Turkic languages one would prefer not to connect the two suffixes, since *-mAz* is stressed whereas other forms negated with *-mA-* place stress on the syllable preceding this suffix; but we know nothing certain about stress in Old Turkic, and stress may have moved forward secondarily (e.g. in analogy to other verb forms, which stress the last syllable).

In Qarakhanid Turkic, *-mAz* appears as *-mAs*, though /z/ is not otherwise devoiced in coda position in that dialect. *-mAs* may have been a dialect variant: We have e.g. *yanmas yer* 'the place of no return' in M

[426] The form by Tekin 1968 read as *'yasa-r'* in KT N10 is quite certain to be conditional *ay-sar* 'since he decrees'.

III nr.16 v 3. There, this is clearly not an instance of the confusion of *s* and *z*, at any rate, as M III nr.16 is an archaic text showing no instances of voice confusion.[427]

'-mA-yUr' does not exist: Zieme 1991: 415 (footn.113) explains the two instances where this was thought to appear as the positive aorists *tümä-yür* 'adorns' and *tarma-yur* 'scratches' respectively.[428]

3.234. Future[429] verb forms

The suffix *-gAy* is used for reference to the future in the whole of Uygur but not in the Orkhon inscriptions or in most inscriptions of the Uygur steppe empire. It is, however, attested also in the Qara Balgasun inscription, the latest inscription of the Uygur steppe empire, and in some South Siberian runiform inscriptions, and found in runiform mss., e.g. *ol tašïg özi üzä tutsar kopka utgay* 'If one keeps that stone on oneself one will prevail over everything' (BlattRun 18). In Erdal 1979: 89 (footn.) I supported the hypothesis (put forward by Gabain 1959: 39) that *-gAy* should be related to *-gA* (discussed in section 3.113 above as a deverbal nominal suffix): The forms alternate for metrical purposes in the QB[430] and the Ottoman future and modal suffix *-A* must come from *-gA*, which is retained in inflexion in Khorasani Turkic. *-gA* may, I believe, have been an original participle suffix: The final /y/ of *-gAy* might have been the nominative form of the archaic demonstrative pronoun **i* / **ï* (found e.g. in *ïnča* and *ïntïn*; see the end of section 3.132 above), postposed for subject reference. This hypothesis would also explain why *-gAy* is only used predicatively and not as a

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[427] An error cannot be excluded; the ms. is (according to Peter Zieme) now lost. Benzing 1952 is of the opinion that *-r*, *-z* and *-s* are of different origins: He approvingly quotes Bang's view connecting *-z* with the deverbal nominals in *-(X)z* (dealt with in OTWF § 3.111) and would like to link *-s* to the *-sXk* suffix forming necessitative participles. While the possibility that *-mAz* should come from *-(X)z* cannot be wholly excluded, the latter proposal seems unacceptable to me, as there is no *'+Xk'* suffix in sight. Benzing wanted to link the latter parts of *-sXk* and *-dOk* to the particle *(O)k* and to *+Ik* (dealt with in OTWF § 2.11) but that is excluded because of the vowels. Benzing 1980 then proposes reading *-sXk* as *-(A)sXk*.

[428] Doerfer 1993: 51, 47 still quotes the first form from ETŞ 12 as *'tuymayur'* and the second form from M III nr.11v3 as *'yadmayur'*. The first instance is the only evidence which he gives for his statement "Negative Konjugation sehr zerstört".

[429] I use this term to cover absolute or relative future meaning, or future tense and future taxis. This vague naming (occurring also above in connection with 'past' and 'present') is resolved in subsequent sections.

[430] E.g. *bolu bergä ödläg kälü bergä kut* (6095) 'Fate will support him and blessing will come upon him' (version auxiliary *ber-* discussed in section 3.254).

participle:[431] *-gA i / ï* would be syntactically equivalent to a sequence like *-mIš ol*, which also consists of a participle followed by a demonstrative and is also, as a verb phrase, limited to predicative use; the original 3rd person would have gotten generalised to other persons once (with the disappearance of **ï*) *-gAy* got opaque. In Old Turkic, *-gA* is found practically exclusively as formative of deverbal nouns but appears with the same function as *-gAy* in KP 75,2 and 76,6 (in a part of the text which shows signs of lateness).

The runiform inscriptions have no *-gAy* but *-dAčI* instead, e.g. in *tedäči, kaltačï, ölürtäči, kältäči* and *ärtäči*, with *-mAčI* as negated counterpart; e.g. *ölmäči yetmäči sän* 'You will not die or perish' (ŠU E5) or *bo yolun yorïsar yaramačï* 'If (we) go this way it will do no good' (Tuñ 23).[432] *-mAčI* appears to have corresponded to *-čI,* another (quite rare) future participle suffix: There are a few instances of the positive counterpart of *-mAčI* as participle qualifying nouns which refer to pregnant living beings: Such are *buzagula-čï kotuz ingäk* (PañcFrag II 8) 'a yak cow about to give birth' and *kulna-čï kïsrak* (DLT) 'a pregnant mare'; a further example of *kulnačï* is found in Windgott 13, of *buzagulačï* in IrqB XLI.[433] Predicative *-dAčI* forms with future reference are found also in Qarakhanid, e.g. *bodun aŋar aydačï* 'The people will say to him …' in the DLT and *mini yettäči* 'He will lead me' in the QB. *[kim]käŋ* (< *kimkä näŋ*) *bermäči män* 'I will not give it to anybody' appears in DreiPrinz 86, an early Manichæan source; the context is fairly clear. Since this text has the form *bergäy* two lines further on, its language may have shown a suppletive relationship between *-gAy* and *-mAčI*.

Occasionally *-gAy* is used with imperative meaning, as future forms sometimes will; see section 5.1 below for an example. I have not met instances of this form having optative meaning, as happens e.g. in Karaim; Gabain states this to be the case but gives no examples. *yaragay* 'It will do' is in KP 48,6 used to show the speaker's agreement to a request, as 'All right!' or 'O.K.!'; this idiomatic use can have come

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[431] Cf. however *tašgaru üngäy täg män* (MaitrH XIII 4v7) 'it looks as if I will go out'.

[432] Tekin 1968: 73 thought that *-mAčI* was contracted from *-mA-gA+čI*. This is unlikely because no such contractions took place at this early stage, although *AgU* > *A* may have occurred in *nälük* ‚to what purpose' (DLT fol. 197 and elsewhere; possibly < *nä+gü+lük*) and in two other very late lexemes. Moreover, the deverbal noun in *-gA* (never negated in Old Turkic) is always agentive and would not have needed the suffix *+čI* to make it so.

[433] Another possibility is that *-mAčI* is a contraction from **-mAdčI* < **-mAdAčI*, the second vowel then getting syncopated through the movement of the accent to the syllable before *-mA-*.

from future meaning as well and need not point at an early specifically modal meaning for *-gAy*. The elliptic modal use of *bolgay* 'it will become' is also discussed in section 5.1.

In Orkhon Turkic there may be traces of another future verb form referring to subjects with possessive suffix and used as main verb of sentences; it only appears twice in one passage in the KT inscription, repeated practically unchanged in the BQ inscription: *üküš türk bodun öltüg; türk bodun ölsüküŋ. beriyä čugay yïš t²ẃg²l²t²(ẃ)n² yazï konayïn tesär türk bodun ölsüküg* (KT S 6-7 and BQ N 5) 'You Turk people were killed in great numbers. O Turk people, you might die! If you intend to settle the Shi-hui mountain forest and the T. plain, o Turk people, you might die." The translation of *-sXk+Xŋ* (once with the oral alternant of the 2nd person singular possessive suffix) as epistemic modal form is conjectural: *-sXk* otherwise forms necessitative participles. A possible nominal rendering would be '(It means) your inevitable death'.

The imminent future form in *-gAlIr* (see section 3.26 for finite, section 3.285 for infinite use) does not seem to have turned up in inscriptional or in Manichæan sources, speaking for relatively late appearance. It might come from **-gAlI ärür,* the aorist of the very rare analytical phrase in *-gAlI är-* (section 3.251). Instances in ZiemeTexterg (Manichæan script) and QB (Arabic script) show that the suffix had /g/ and not /k/. Gabain 1974 § 259 with n.41 and Tezcan (BT III 77 with n.) spell it with /k/ because they think it resulted from a contraction with the verb forms *kal-ïr* and *käl-ir*. This is, I think, less likely than my hypothesis; cf. the criticism expressed by Arat in ETŞ n. 35_{110} (p. 433).

3.24. The analytical verb

A verb phrase can, beside a fully lexical verbal kernel, include another verb, which can be grammatical to varying degrees. See section 4.23 for complex verb phrases in which none of the verbs is purely grammatical; the 'other verbs' in the sections of 3.25 can have partly grammatical, partly lexical meaning. When only one of the verbs in a verb phrase is lexical to any degree, the construction is called 'analytical'; e.g. *öŋdün sözlädi ärdi* (Abhi B 82b4) 'He had said before ...'. There are even triple sequencess such as *kälmiš ärdi ärsär* (HtsTug V 79,25) 'even though ... had come' or *köz ärklig yinčürdäči istädäči ärmäz ärip* (Abhi B 56a10) 'the sense of sight not being an analysing or searching one'.

The second (and third, if any) verbal component of an analytical verb phrase is grammatical: Such complex verb phrases are necessary for expressing categories such as tense, taxis, actionality, intention, ability, version, status, epistemic and deontic mood or for undergoing subordination in conditional or converb clauses. These contents are discussed in the following sections.

Analytical verb phrases expresing actionality, intention, ability or version (discussed in section 3.25) use a variety of verbs, but other categories are formed by having forms of lexical verbs get followed by forms of *är-* 'to be'. *bol-* 'to become' also appears to express aspect, not actionality, only when added to perfect participles in *-mIš*; (see section 3.26). The lexical element always precedes the grammatical element, although scrambling is otherwise common in all texts. Another optional (possibly clitic) final member of a verb phrase is a subject pronoun.[434] Such sequences can be broken apart only by the particles *Ok* (e.g. *ozmiš ok ärür; bermäz ök ärsär*) and *mU*. The particle *idi*, which precedes negative words to stress their negativity, can also be part of the verb phrase. When the lexical part of these phrases is one of the forms used as main predicates of sentences, either of the participle type (*-mIš, -yOk* etc.) or such that are used only predicatively (*-dI, -gAy*), the results generally come to be members of the tense-aspect system discussed in section 3.26. When converbs are used as first elements in analytical constructions, the products always express actionality, intention, ability or version.

Forms of *är-* which appear as non-first element in analytical sequences are the preterite, *ärür* and *ärgäy* to serve the expression of tense and taxis (see section 3.26), *ärmiš* for the status category (section 3.27), *ärdök* with possessive suffix to make object clauses, *ärip* / *ärmätin* to turn sentences into adjuncts und *ärsär* to incorporate them into conditional sentences or correlative relativization (as in *kanyu kiši kim bo yarokun ärmäk[ig] k(ä)ntü köŋülin ičrä tarïmiš ärsär, ol kiši b(ä)lgüsi antag ärür*: (M III nr. 8 VII r2-4) 'Any person who has planted inside his own heart this existence with light, that person's mark is as follows'). If *ärmiš*, *ärdökin*, *ärip*, *ärmätin* and *ärsär* were to be replaced by *-mIš*, *-dOk+*, *-(X)p*, *-mAtIn* and *-sAr* forms of the lexical verbs, these verb phrases would lose the possibility to express aspect.

When a verb phrase consists of two verbs, categories can be distributed among them in various ways. With the pluperfect consisting

[434] *bän* appears as *män* in this position (though not as independent pronoun) already in some runiform inscriptions, showing that the pronoun was indeed part of the verb phrase already at that stage.

of two *-d+* forms, the first is the one inflected for 'person'; this is what we have in the first part of the following sentence: *kayu üdün män beš törlüg ulug tülüg*[435] *kördüm ärti, antada bärü ... olorgalï küsäyür ärtim* (MaitrH XI 4v18) 'When I had seen the five sorts of great dreams, from that time on was I wishing to sit ...'. In the second analytical phrase of the quoted sentence, it is the preterite form which is marked for person, as that is morphological and does not demand a pronoun. The 'number' category can have it both ways: In *yäk ičgäkig kertgünmäz ärtilär* (TT VI 131) 'They were not wont to believe in demons' and in several additional sentences following this one or in *ötgürmiš topolmïš ärdilär* (Ht VIII 55) quoted above it is the auxiliary which has the plural suffix. In *čankramit kïlu yorïrlar ärti* (MaitrH Y 225) 'They were walking about as a spiritual exercise' or in *tägrä tolï tururlar ärti* (KP 71,4), however, the lexical verb has the plural. *ädgü ö[glis]i*[436] *bolyoklar ärdi* appears in U IV D 10, e.g., *tavïšganka kälyök ärdilär* three lines further on, in U IV D 13: In most of the sentences quoted, the subject is explicitly referred to only in a preceding sentence. In *kertgünč köŋüllüg upasi upasančlar bar ärtilär* (TT VI 130) 'There were truly faithful male and female community members' plurality is also expressed by the finite word.[437] The TT VI 131 example just quoted is an example of 'negation' getting expressed by the lexical, the first element. Another distribution of negation would, in principle, also be possible, as with the politeness auxiliary *tägin-* in *yazokka tüšä tägin-mä-gäy ärtimiz* (KP 8,1) 'We would not venture to fall to sin'.

3.25. Types of action

The verbal categories for which complex verb phrases are formed can express tense or taxis, mentioned in the previous section, which localize the stretch of time during which the event took place with respect to the moment of speaking or to other events. Other complex verb phrases – discussed here – serve the categories of actionality, intention, ability or version, which refer to factual features of the event. Actionality describes the *course* and *development* of the event in time and specifies the *stage* of this development in which the point referred to is situated, as actually perceived by the speaker. It contrasts with aspect, expressed

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[435] Lacunas of the passage are here not marked as such as it is attested also in the parallel Sängim ms. (BT IX p.106).

[436] Thus following UW 404a.

[437] *ärti* can serve as the past tense of *bar* 'there is'; here, however, the two are combined.

not by auxiliaries but by the morphological verb forms, which is about the *presentation* of the event's course, taken by itself, as adapted by the speaker to the needs of his context (and not related to his perception). Another three 'types of action' are described in sections 3.252-3.254: 'Intention' is about the psychological preparedness of the subject for the event; 'ability' expresses the ability of the subject to carry out the action referred to while 'version' expresses its directionality, specifying whether its beneficiary is the subject or those associated with him, or some other party. Physical directionality, as in *ögür kaz ... učup barïr ärdi* (Ht III 777) 'A flock of geese was ... and flying away', where *bar-* signifies 'away', is not discussed here, as we take this to be a lexical and not a grammatical matter.[438] The use of the auxiliaries *yarlï(g)ka-, ötün-* and *tägin-,* which express the social positioning of the subject, in some cases thereby reflecting politeness and related pragmatic matters, is relegated to section 5.3.

Auxiliaries as described in this section and in section 5.3 have also been called 'postverbals'; they follow lexical verbs, forming sequences with them. The lexical verb is mostly in the form of a vowel converb, but the *-(X)p* form (often interchangably with the vowel converb) and the supine in *-gAlI* are also governed by such auxiliaries, as well as (less often) verbal nominals like the one ending in *-mIš* and the aorist. Occasionally, lexical verb and postverbal have the same shape, thus lacking a formal sign of government. This is, apparently, what we have in *yaylag tagïma agïpan yaylayur turur män* (IrqB 62) 'Climbing the mountain which serves me as summer station I spend the summer there', where the lexical verb *yayla-* and the auxiliary *tur-* both are in the aorist.[439]

In Orkhon Turkic, *ïd-* in the meaning 'to do something completely', *bar-* used for signifying 'to gradually get more intense' and *kör-* with

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[438] Anderson 2002, who deals with the categories described in this section, also posits a category of "orientation" among them, with two members expressing motion away from and towards the speaker: a translocative in *bar-* 'to go', as in *äsri amga yalïm kayaka ünüp barmïš* 'A dappled wild goat went up a steep cliff' (IrqB) and a cislocative in *käl-* 'to come', as in *süt akïp kälti* 'milk came flowing out' (Suv 621,15). *uč-* 'to fly (off)' and *uča bar-* 'to fly off', both used as euphemisms for 'dying', are another example for the (not purely spatial) content of this opposition.

[439] KP 1,5 has been read as *kuš kuzgun sukar yorïyur, sansïz tümän özlüg ölürür* and translated as 'Birds pick (the ground), killing innumerable creatures'. Birds do, of course, have the habit of walking about the freshly cultivated earth when looking for worms and the like but, since the context does not make one expect their walking about to get thematized, *yorïyur might* be transitory towards the auxiliary use of *yorï-*. Peter Zieme has, on the other hand, proposed reading *yulïyur* 'plucks' instead of this word; this is perfectly possible, as *l*-diacritics are often forgotten by scribes.

the meaning ‘to make sure one does something’ are still the only lexical verbs used as auxiliaries, all three joined to the vowel converb; the first two express actionality, the third intention. The incorporation process of *u-* ‘to be able’, the fourth early auxiliary, started right after the Orkhon Turkic stage; it gradually became part of a fused morpheme sequence expressing impossibility. The three auxiliaries mentioned first remained independent words, as did the subject pronouns.[440]

3.251. Actionality

This category deals with the development and change of the event in the course of time. In Old Turkic, actionality is mostly expressed by partly grammaticalised auxiliary verbs; there are, however, also other means to express it. The content of the passive formative *-sXk-* (see OTWF section 7.41), e.g., differs from that of the more common passive formative *-(X)l-* in actionality, among other things: *tutsuk-* is ‘to get caught’, e.g., whereas *tutul-* is ‘to be held’ or ‘to be caught’; the *-sXk-* form is marked as inchoative. The task of some marginal deverbal verb formatives consisted of expressing actionality; thus the formative *-gIr-* mainly attested in the DLT and documented in OTWF 539-540 is added to both transitive and intransitive verbs and gives the meaning ‘to be about to carry out the action denoted by the base verb’. The aorist can, beside expressing continuous aspect and continuous action, also express repeated action, as *körür* in *balïk taštïn tarïgčïlarag körür ärti* ‘(in his outings from the palace) he used to see the farmers outside the town’ (KP 1,3) or *sözläyür* in the following passage: *birök öziŋä kälmagu täg nä nägü iš išlägäli ugrasar ”...” tep sözläyür ärdi* ‘if, however, she intended to do something which she wasn’t supposed to do, she would say ”...” (U III 54,15). Similarly *ölürür* in *yol yorïdačï yalŋuklarnïŋ ädin tavarïn kunup karmalap özlärin ölürür ärtimiz* (MaitrH XX 13r18) ‘We used to rob the possessions of travellers and kill them’.

In Uygur the auxiliaries *alk-, bar-, bol-, är-, ïd-, kal-, käl-, tur-, tut-, tükät-* and *yorï-* express actionality. This may not be a complete list, as it is often difficult to ascertain whether a verb is fully lexical or an auxiliary; the distinction between these two can be fuzzy to some degree. Take *yavašïm birlä yakïšïpan adrïlmalïm ... közi karam birlä ...*

[440] A single Orkhon Turkic instance of the incorporation of a lexical converb with the auxiliary *ïd-* is mentioned below.

külüšügin[441] *oloralïm* (M II 8,20). This could mean 'Let's draw close, me and my gentle one, and never separate; may my black-eyed one and me *sit* and laugh in company', taking *olor-* to be lexical; or, if *olor-* is understood as an actionality auxiliary, it could mean 'may we *keep* laughing together'. The translation of T.Tekin 1968: 290 for *türk bilgä xagan türk sir bodunug, oguz bodunug igidü olorur* (Tuñ 62) takes *olor-* to signify 'to rule' (as it clearly sometimes does): "Turkish Bilgä Kagan is (now) ruling, taking care of the Turkish Sir people and the Oguz people". Anderson 2002 (following Kondrat'ev 1981: 117), on the other hand, takes the verb *olur-* (as they both write it) of this passage to be a durative auxiliary. A similar sentence occurs in KČ E2: *bil]gä Köl Ič Čor Tarduš bodunug eti ayu olortï*, by Tekin rendered as "... reigned ruling and governing the Tarduš people". Both interpretations are perfectly possible but we follow Tekin if no unambiguous Old Turkic examples for an auxiliary *olor-* are brought into the discussion.

Verbs which by lexical meaning denote a stage in the development of an event, e.g. *bašla-* in *nomlagalï bašla-* (Ht III 815) 'to start to preach', should not be called auxiliaries: They do not create members in a grammatical category. See section 4.23 for such constructions. The Middle Turkic Qiṣaṣu 'l-Anbiyā' uses *-U bašla-* to denote the beginning of an action.

The most common construction for expressing actionality is for the auxiliary to govern a converb form of the lexical verb. The most common converb is here the vowel converb; all auxiliaries which can govern *-gAlI* forms are found to govern also *-(X)p* forms and vowel converbs, and most auxiliaries governing *-(X)p* forms are found to govern vowel converbs as well. When a particular auxiliary was used in different construction the meaning did not always change, but *tur-* 'to get up; to stand' has two quite distinct actional meanings: The meaning of *-gAlI tur-*, which describes what is about to take place, emanates from 'getting up'; on the other hand the meanings of *tur-* with the vowel converb, with the *-(X)p* form and with the *-mIš* and aorist participles, which describe continuous or repeated activities or states, come from 'standing'.[442]

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[441] The facs. shows that a reading *külüšüpän* as converb cannot be excluded; there is no other instances of *külüš-üg* or *külüš-ük* and such a derivate from an *-(X)š-* verb would be very much of a rarity.

[442] The use of *tur-* as copula, described in section 3.29, also comes from this stative meaning (note that 'stative' comes from Latin *stare* 'to stand').

The sequences *-U är-*, *-U yorï-*, *-U tur-* and *-U tut-* all denote continuing or repeated action. With Qarakhanid *-U bar-* the action intensifies with time and the speaker witnesses its development. *-U käl-* also denotes actions which have been going on for some time, but looks at them from a late stage, when they perhaps have become habitual. *-U kal-* actually says that the action's last stage is being witnessed. *-U tükät-, -U alk-* and *-U ïd-* all three denote completion; *-U ïd-* differs from *-U tükät-* and *-U alk-* in implying that the completion is reached easily, with momentum and in one drive.

-(X)p är-, *-(X)p kal-* and *-(X)p alk-* appear to have had the same meanings as *-U är-*, *-U kal-* and *-U alk-* as described above. The rare *-(X)p tur-* was used for referring to states reached after the end of the activity described by the lexical verb; whether it was also with durative meaning, as was *-U tur-*, is not clear. *-(X)p bar-* is, in the Uygur examples I have encountered, used for describing processes approaching a crisis, as *-U bar-* referred to above; its counterpart with vowel converb, which I have met only in Qarakhanid, also refers to activities getting stronger as time goes by, but is used with positive meaning as well.

-gAlI alk- may have had the same meaning as *-U alk-* and *-(X)p alk-*. The common *-gAlI tur-* denotes imminent events while the rare *-gAlI är-* may denote intended actions. The DLT's *-gAlI kal-* states that something almost happened (but then didn't, or didn't as yet), thus being, in a sense, the opposite of *-gAlI tur-*. With none of these four auxiliaries used with the supine is there any actual action going on at the moment of speaking, then, be it that the action has been intended, is imminent, almost happened or has already been completed.

Fourthly, there are auxiliaries governing participles with actional content. The aorist followed by *turur* denotes continuing action, the meaning it also has with vowel converbs, and *-Ar barïr* has the same meaning as *-(X)p barïr*. *-mIš tur-* forms descriptions of states following completed actions. *bol-* is linked to the aorist and to *-dAčI* for referring to transitions into states; states with future perspective in the case of *-dAčI bol-*.

Durative meaning appears most commonly to have been expressed by *tur*(*-ur*) with the vowel converb. This is also the semantically least marked way: It denotes continuing or repeated action which is not necessarily agentive; durative *tur-* no doubt evolved from the use of this verb to mean 'to stand'. There is a Manichæan instance in *kut kolu alkïš pašik ayu turur sizlär* (ManBeicht 6) 'You keep praying for grace and

intoning blessings and hymns'. In *ïdu turur* 'keeps sending (again and again)' (TT X 341), the meaning is iterative (*ïd-* 'to send' being a final-transformative verb), while it can be durative or iterative in instances such as the following: *busuš kadgu bälgüsi äŋirä turur* (TT I 79) 'The signs of sorrow and trouble keep pursuing (you)'; *tsuy irinčülärimiz asïlmadïn üklimädin korayu turzun* (TT IVB 45) 'may our sins continuously diminish, not increase or become more numerous'. *azkya öŋrä yorïyu turzunlar; män una basa yetdim* (Suv 615,14) 'Please walk on a bit; I will have reached you in a moment!' or *yavlak sav bälgülüg boltï; közünü turur* (DKPAMPb 161) 'an evil matter has appeared and is in current evidence' are clearly durative: *yorï-* is non-transformative while *közün-* is initial-transformative. Participial *turur* instances: *karïšu turur tört azïglïg* (ms. U 5396 quoted in the n. to BT XIII 25,4) 'having four canine teeth which keep on gnashing'; *kaxšašu turur etigligin tümägligin ... kälir* (BT III 218) 'she comes along with clanking ornaments'; *yalïnayu turur trižulïn alïp ...* (TT X 358) 'taking up his flaming trident ...'. There is an example with an inchoative verb in the verse *saranlanmak kirig sakïndačïnïŋ / sarïgaru turur közi* (ETŞ 11,37) 'The eye of a person who thinks filthy miserly thoughts keeps getting yellow (as an effect of this vice)'. The verb phrase *sözläyü turur ärkän* is used in U III 57,2_2, U IV A 233 and B 18 (all in parts of the same text) in contexts that betray durative aspect rather than actionality.

When *tur-* is used with *-(X)p* forms of the verb it is not clear whether it is meant to describe states or whether these are instances of lexical *tur-* 'to stand': *yavlak yagï seni közädip turur, artatgalï sakïnur seni* (ChristManManus, Christian fragment 8) 'The evil enemy is continously (or: 'standing there and') observing you, plotting to corrupt you'; *keŋ yetiz kögüzintä iki ämigi artokrak yarašïp turur ärdi* (U IV B 55) 'Her two breasts on her wide bosom were standing out very harmoniously'.

With *är-* the vowel converb is more common than the *-(X)p* converb: Examples for *-U är-* are quoted in UW 405b-406a, §25 of the entry on *är-*. This rather common sequence conveys durative meaning; e.g. *kop adadïn küyü közädü ärürlär* (MaitrH XI 4a9) 'they are engaged in guarding (her, the future mother of Buddha Maitreya) from all dangers'; *ul[uš ba]lïk[larïg] küzädü ärzünlär* 'May they continuously guard the towns and cities' (MaitrH Y 16); *šastrlarïg ... agtaru ärür biz* (Ht VII 1023) 'we are engaged in translating the *śāstras*'. All examples I have come across describe agentive activity, not a state or a process.[443] The

[443] For *-U är-* cf. also Gabain's n. to l.1870 of her edition of Ht VII and Röhrborn's n. to l.2035 of his edition of the same Ht book. The durative participle suffix *-AgAn*, which

sequence *-(X)p är-* appears to convey post-terminal meaning, e.g.: *ol azïŋ kim taštan aška ičgükä katlap ärür, ymä ätözkä kirür, ol ičräki az birlä katalur.* (M I 16,6; Manichaean) 'That lust of yours, which is mingled with food and drink from outside, enters the body and mingles with internal lust'. Other instances for the sequence *-(X)p är-* are mentioned in §26 of the entry for *är-* in UW 405b-406a; an instance with *-mAtIn*, the negative counterpart of the vowel converb and of *-(X)p*, can be found in §27.[444]

yorï- 'to walk' denotes ongoing action when used as an auxiliary, e.g.: *kamag on bölök šastr yaratdï; amtï barča keŋürü yorïyur* (Ht V 1 b 5) 'He composed a *śāstra* of all in all ten chapters; at present he is busy elaborating on it all'; *anta ymä sansïz tümän suvdakï tïnlïglar buza butarlayu yorïyurlar sorarlar tikärlär sančarlar* (Maitr 183v24) 'There, again, innumerable myriads of water creatures are busy destroying them and tearing them to pieces and they suck them out, sting them and pierce them'. The use of *yorï-* as auxiliary has to be distinguished not only from the meaning 'to walk' but also from the meaning 'to live' or 'to lead a certain way of life' and from its use as copula (section 3.29). The instance *tamudïn kurtulup amtï bo käntü uvut yenlärin äŋinlärintä yüdä örtänü yala yorïyurlar* (Maitr 75v20), e.g., could have the verb *yorï-* either as auxiliary or in the more literal meaning of 'walking about carrying their penises on their back' or just 'living with their ... loaded on their back'. *kayusï muŋadu adïnu oynayu külä yorïyurlar* (Maitr 89r17) could also describe the gods' way of life and not just their current behaviour, although the sentence is an utterance by somebody who just happens to meet them: He might be extrapolating from his observation. The difference between *är-* and *yorï-* as auxiliaries with the vowel converb may be that the activity is current with *är-*, a way of life with *yorï-*. A further instance governing the aorist of the lexical verb is quoted above in this section. Usually, *yorï-* governs the vowel converb, this actional phrase leading to the present form in the Oguz languages.

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exists in a number of modern Turkic languages, can possibly be the result of a contraction of *-A är-kän*; this would assume the existence of a *-gAn* participle from *är-* beside the petrified conjunction *ärkän*.

[444] *ärmiš* in *biz*[*iŋä*] *tapïngu yükündü ärdini berüp ärmiš* (U I 8) 'It turns out that he has given us a jewel to worship' is, according to UW 392, to be read as *turmïš*. *-gAlIr*, mentioned in §27 of the *är-* entry, is not a converb, as stated there, but a participle.

tut- 'to hold' is in Manichæan texts used for expressing continuously consistent behaviour: *alkïnču ölüm künin öyü tutar* (M III nr.8,VII v6) 'He keeps his mind on the day of death'; *özlärin saklanu ... täzgürü tutzunl[ar* (M III nr.20, 38,6_1 + ZiemeTexterg II) 'Let them be sure always to be on guard and keep behaving evasively'.

käl- 'to come' is used as an auxiliary indicating that the action described by the lexical verb has been going on for some time before reaching the state it is at when being narrated; e.g.: *kïlmïš kazganmïš buyan ädgü kïlïnčlarïnïŋ ešilü birikü kälip tüš bermäki üzä* (DKPAMPb 43) 'as a result of the good and saintly deeds which he carried out and earned having gradually become a considerable heap and having given fruit'. *kaparu kälmiš ätintäki söl suvï* (U III 41,0-1) is the 'the lymph liquid (which was) in his flesh which had become quite swollen'. Similarly Qarakhanid *olardïn kalu käldi ädgü törö* (QB 269) 'From them good laws have been passed down'. *ünä käl-* 'to come forth' in Höllen 102-3, on the other hand, shows *käl-* in its cislocative meaning.

kal- is used as auxiliary with vowel and *-(X)p* converbs to express that the action described is the end stage of a process: *amtï ärtip kalïr ärki sän* (TT II,2 7) can perhaps be freely translated as ‚Now it looks like things will soon be over with you'. Similar in content we find IrqB 17: *özlük at öŋ yerdä arïp oŋup turu kalmïš* 'A royal horse came to a standstill in a desert, exhausted and wilting'. The DLT (fol.16) says that the sequence *-gAlI kal-* denotes "that the action was about to be performed but has not yet taken place" and gives the following examples: *ol turgalï kaldï* 'He was about to stand up'; *ol bargalï kaldï* 'He was about to go but had not yet gone'. This is an actional content; it is semantically comparable to the QB's (and later) *yaz-*, which expresses the observation that somebody missed the carrying out of an intended act.

-U bar- is used with actional meaning in Orkhon Turkic and Qarakhanid but not in Uygur (which has *-(X)p bar-* instead): *türk bodun ... yokadu barïr ärmiš* (KT E 10) signifies 'The Turk nation was gradually getting destroyed'. In *turu etlü bargay kamug išlärïŋ / eliŋ arta bargay keŋügäy yeriŋ* (QB 5915), on the other hand, the *-U bar-* sequence is positive: 'All your affairs will prosper more and more, your realm will go on growing and your territory increase'.[445]

[445] In *ketä bardï kündä üzüldi küči* (QB 247) 'His power waned and was broken in a day', *bar-* seems to appear in its lexical use and not as auxiliary.

Uygur *bar-* 'to go' governs *-(X)p* forms of final-transformative verbs as auxiliary, which should, of course, be distinguished from the translocative meaning of this verb: *ätözintä ot mahabutï küčlüg bolup örtänip barïp tükäl küč küsün bergäli umaz* (DKPAMPb 536) 'The fire element in his body comes to dominate, he burns away and is unable to muster energy' shows a process getting stronger and worse. Then we have *mäniŋ yüräkim yarïlïp böksilip barmadïn näčükin turur munï täg* (Suv 626,23) 'How come my heart doesn't split and break apart but stays like this?'; *amtï čaštanï elig közünmäz bolup bardï* (U IV A 233) 'Now king Caṣṭana has completely disappeared'; *an bitigdä savï takï adïrïp barmayok ol; anïn isig özi üzülmäz* (Suv 18,14 + a Berlin fr.) 'In the court register her case has not yet reached a decision; that is why she isn't dying' and *ïnčïp igläyü birlä ök sav söz kodup tutar kapar ärkän ölüp bardï* (Suv 4,17-19) 'The moment he got ill he lost the power of speech and, while trying to regain his powers, he suddenly died away'. The last two and in fact also the second example refer to death, which is a sudden change of state. In Tachi 28-9 we have two actionality auxiliaries: *bo nomka kertgünmägüči tïnlïg yorïyu turur ärkän ök ölüp bargaylar* 'Creatures who do not believe in this teaching will suddenly die right in the middle of their life'. What is common to all the examples is the finality of deterioration, which is what *-(X)p bar-* appears to have expressed. In *näčä bo ... täŋrilär täŋri katunlarï ... üd ärtürürlär ärsär, näčä näčä kšan üdlär ärtsär, anča anča ädgülüg özläri täŋri mäŋiläri ärtär barïr* (MaitrH X 1r17) 'In the measure that these ... gods and goddesses spend time ... and ... the moments pass, in that same measure do their goodly existence and their divine pleasures gradually get lost' *ärtär* and *barïr* are used in parallel fashion, but the latter was clearly added to express the same actionality as above.

Action which is *about* to take place is mostly described by the sequence *-gAlI tur-*: e.g. in *samtso ačarï öz eliŋä bargalï turur* 'The master Tripiṭaka is about to return to his homeland' (Ht 5,270). Many of the examples describe imminent danger: *muna amtï balïk ičiŋä kirgäli turur* '(The monster) is, right at this moment, about to enter the town (fragment quoted in the note to TT V A41). *isig özüm üzülgäli turur* (U III 37,28) is 'I am about to die', *iki yanïm ... oyulup tälingäli turur* (U III 37,3) 'my two sides are about to ... get hollowed out and pierced'; see U III 37,3 and DKPAMPb 1116 and 1129 for further examples. In *on mïŋ balïklar ... unakïya ölgäli turu täginürlär* (Suv 603,11) '10,000 fish are facing imminent death at any moment' the construction gets subordinated to *tägin-*, a verb denoting 'experience'. This actional use

of *tur-* accords with its particular meaning when it signifies 'to get up, arise' (and not 'to stand').

What *-gAlI är-* used in *ädgü kïlïnčï bar ärip adïnlarka ävirgäli ärsär* (BT II 1201) signifies is not clear, as most of the main clause is in a big lacuna. I tentatively take it to mean 'be about to (or: intend to) deflect its benefit to others', somewhat similar to the meaning of *-gAlI tur-*. The sequence **-gAlI ärür* might be the source of the suffix *-gAlIr*, which (also) refers to the imminent future (discussed in sections 3.26 and 3.285). The formation with *-gIr-* attested only in the DLT and discussed in OTWF section 6.3 forms verbs stating that an event is about to take place. In view of its meaning it *may* have resulted from a contraction of *-gAlI är-*. What speaks against this is its aorist vowel, which is not /U/ as with *är-*, but /A/; the OTWF proposes a different etymology for the formative.

turur is attested also with participial forms of the verb; e.g. with *-mIš*: *irinč [yar]l(ï)g umugsuz ïnagsïz bo tïnlïglar montag ämgäklig [ažun]da tüšmiš tururlar* (U II 4,8) 'these poor hopeless creatures had fallen into such an (existence) of suffering'. This 'historical present' clearly describes a resultative state, the situation in which the creatures find themselves after their fall. An early instance with an aorist, *yaylayur turur* 'spends the summer', is quoted above; it refers to a continuing state. Similarly *aka enilär mä barïp körüp kïlm(a)z turur* (UigBrief C 10-11) 'The elder and younger brothers have not been coming to see us either.'

In *täŋri kïrkïnlarïn täŋri ogulanlarïn alkamïš törütmiš ol, kim ol örginniŋ özin täg ortosïn täg ... bolup tururlar* (BT V 175) 'He has created[446] the divine maidens and divine youths, who have become as the heart and center ... of that throne' the sequence *-(X)p turur* is unlikely to be describing an ongoing process; rather, this must be a present perfect, as in a number of modern languages: *bol-* 'to become' is a final-transformative verb in that one *is* the new thing just after one has finished becoming it.[447]

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[446] See the n. to the passage for the unusual use of *alka-*, apparently copied from Iranian.

[447] Not all instances of the sequence *-(X)p tur-* need have *tur-* as auxiliary: The sentence *keŋ yetiz köküzintä iki am[ig]i artokrak yarašïp turur ärdi* (U IVB 55), e.g., probably signifies 'On her broad chest her two breasts were standing out exceptionally harmoniously' with *tur-* in lexical rather than grammatical use. The sequence aorist + *ärti* is, however, an instance of an analytical verb phrase.

When added to present or future participles, *bol-* 'to become' describes transition into new states, presenting the action as the culmination of a process: In *keŋränü aš berür boltïlar* (KP 68,3) 'They began to grumble whenever they were serving him food', *bol-* expresses the entrance into a situation characterised by repeated actions (of grumbling at every meal), i.e. inchoative meaning. Similarly *käntü käntü ätözlärintä ... yïd yïpar tozar ünär boltï* in the ms. T III M 168 quoted in the n. to TT VA 117 'perfume began emanating from the bodies of each one of them'. In OTWF 386 examples for the construction *-gAn bol-* are quoted from various texts; there, the infinite verb form appears to be used nominally. In *bizni barča utup yegädip biznidä öŋrä burxan kutïn bultačï boltï* (U IV A 265-268) 'he surpassed all of us and has become destined for buddhahood before us' the subject is described as just having attained a new future: This is a future inchoative. A complex verb phrase of the shape *-(X)gčI bol-* is found e.g. in *burxanlarka nom tilgänin ävirtgäli ötügči boltum* (Suv 163,18) 'I beseeched the Buddhas to turn the wheel of dharma'; in verbal content this is similar to the common phrase *ävirtgäli ötün-* (attested e.g. in BT II 114). Cf. also the different construction in *burxanlarïg ... ävirtgükä ... paramïtlarïg tošgurtguka ötügči bol- ... nom tözin ... ukïtguka ötügči bol-* (Suv 181,17-23). 'to become one who does ...'. *bol-* appears never to be linked with converbs; see section 3.29 for its use with nominal predicates.

We finally turn to the notion that the action referred to by the lexical verb has been completed. This is most commonly expressed by *tükät-* 'to finish (tr.)' as auxiliary governing the vowel converb: *bilgülükin ukgulukïn ornatu tükätip temin ök buluŋ yïŋak sayu yaddïlar* (Ht VIII 72) 'They finished determining how they (i.e. the teachings, accusative) were to be understood and then immediately spread them to all four directions' or *küčüm küsünüm kävilü tükätti* (Ht VII 2097) 'My powers have waned completely'. Note that *kävil-* is intransitive: The auxiliary is in any case *tükät-,* not *tükä-* 'to finish (intr.)'. Other examples for the sequence are *ärtürü tükät-* (ETŞ 13,29), *yarlïkayu tükät-* (Ht V 13 b 27), *körü tükätip* (Ht V 1 b 13), *kïlu tükät-* (Ht V 7 b 11), *ölürü tükät-* (Suv 22,13) and *yorïtu tükät-* (ShōAv 288).

In some cases there appears to have taken place a semantic shift from 'completely' to 'already': *kïlu tükätmiš agïr ayïg kïlïnčlarïm* (SuvSündenbek 75) is 'the gravely evil deeds which I have already carried out'; similarly *öŋrä ölürü tükätmiš tïnlïglar* elsewhere in Suv and *öŋrä kašmirtä [... v]idiš alu tükätmiš ardi* (Ht III 828) 'Before, in Kashmir, he had already received instruction'.

alk- 'to destroy, do away with' is, as an auxiliary, used with a meaning similar to *tükät-*; e.g. in *sakïnč kïlu alksar* (TT V A41) 'when one is through with the meditation' or *sözläp nomlap alkmaguluk ulug buyan ädgü kïlïnč* (Suv 671,17) '*puṇya* so great that one should not expect to be ever finished describing or preaching it'. Note that the first-mentioned instance uses the vowel converb, the second the one in *-(X)p*. In *kïlïnč kučin kïra alkïp arïtïp ... nizvanï kučin kïduyu*[448] *tükätip* (ETŞ 13,109-110) the two actional verbs *alk-* and *tükät-* are used in parallel manner. Similarly in *känt tägräki bodunug bukunug ölürgäli alkïp muna amtï balïk ičiŋä kirgäli turur* (TT X 52) 'He is now through with killing the population in the town's suburbs and just about to enter inside the city', which shows two auxilaries with *-gAlI*, one denoting completed action, the other action just about to start. Cf. also UW 95a, entry *alk-*, §3.

The auxiliary *ïd-* 'to send off; set free' refers to actions carried out completely, as *oplayu tägip sanča ïdïp topulu ünti* (KČ E7) 'He attacked head on, routed (*sanč-*, them) in a whirlwind (*ïd-*), pierced (their rows) and emerged.' In *ïčgïnï idmiš*[449] 'lost (trans.) completely' (O F2, Orkhon Turkic). the converb suffix (if read correctly) adapted itself to the vowel of the auxiliary: The sequence seems to have already started its way towards morphologization, which we find completed in a number of modern Turkic languages including Turkmen (with the whole verb paradigm) and Khaladj (only in the imperative). Though the auxiliary exists also in Uygur, e.g. *unïtu ïd-* (Xw 14) 'to forget completely', Uygur does not appear to have adapted the converb vowel to this auxiliary's stem. Nor does this happen in *sanča ïdïp tupulu ünti* (KČ E7) 'He routed them in a whirlwind, pierced (their rows) and emerged (on the other side)'.

A ms. which must be late as it has the Mongol loan *laggač* < *naγaču* (see the end of § 2.404) on l.72 shows the sequence *-(X)p ïd-*: *maytri burxannïŋ yarlïgïn bitip ïdtïmïz* clearly signifies 'We have fully written down Buddha Maitreya's pronouncement', not 'we have written and sent off ...'.

3.252. Intention

The verbs *ugra-* and *kör-* are used for expressing that the subject intends to carry out the action denoted by the lexical verb, whereas *kïlïn-* expresses physical preparation. While *ugra-* just states that there

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[448] Not *kıdıyu* as written in the edition.

[449] Spelled with d^2 and s^2.

is an intention on the part of the speaker, *kör-* 'to see, to look' expresses a conscious intentness towards carrying out the action described in the lexical verb: *katïg yanï kura kördüm* (DLT fol.541) 'I tried to string the rigid bow'. This meaning is attested already in the Orkhon inscriptions: *buŋadïp kagan yälü kör temiš* (Tuñ 26) 'The kagan reportedly got worried and said 'See to it that you ride fast!'; *saklanu körgil* (TT X 426) 'Make sure that you take care!' is an Uygur example. With *ugra-* we have, e.g., *nä nägü iš išlägäli ugrasar* (U III 54,15) 'if she intended to commit something'; cf. U III 11,15$_2$. What the meaning of *kül-* in *aka enilär mä barïp körüp külm(a)z turur* (UigBrief C 10-11) 'The elder and younger brothers have not been coming to see us either' might be is not clear; by the context one might think that it means 'to make a small effort towards an aim'.

3.253. Ability and possibility

The verb *u-* expresses the subject's ability to carry out the action denoted by the base verb. In early texts, *u-* is sometimes used as a lexical verb: *otsuz suvsuz kaltï uyïn* 'How should I manage without grass or water?' (IrqB 45); *sinidin ketip näčük ugay män* 'How will I manage if I leave you?' (U III 48,11) is rather similar in content. *bo yer üzä näŋ andag t(ä)v kür yälvi arvïš yok kim ol umasar; š(ï)mnu [k]üčiŋä kopug ugay* (M II 5,10-11) 'There is no such trick and magic in this world as he would not be capable of; with the devil's support he will be capable of everything'. Beside that there are two petrified forms, *u-sar* 'if possible' (e.g. in Tuñ 11) and *u-yur* 'capable person' (e.g. in U III 5,13).

In its auxiliary use, *u-* always accompanies converb forms of verbs. Most commonly, *u-* follows the vowel converb of the main verb; already so in Orkhon Turkic: *eliŋin ... käm artatï udačï ärti* 'who could have corrupted your realm?' (BQ 19). The converb vowel of the main verb changes to *-U* in most post-inscriptional texts (unless it has this shape already), being involved in a process of morphologization developing in the course of the history of Old Turkic; see Erdal 1979 and 1979b; see section 2.413 above). The two words (the lexical converb and the finite verb of inability) were not yet fused in most of early Uygur, as the particle *ymä* could get between them; e.g. *ölü ymä umaz biz* (MaitrH XX 14r17) 'Yet we are unable to die'. They are, however, joined in spelling in Uygur texts in Sogdian script.[450] The QB spells them as one word, with one vowel (*U*) at the juncture; clearly,

[450] Assuming that *alkumaz* (325) really signifes 'He is unable to destroy' and *alumadï* (86) 'he was unable to take'; the contexts of both words are completely destroyed.

fusion had already taken place in a part of the Old Turkic dialects. Most instances are negative, e.g. *ädgülüg tatagnïŋ idiši bolu umazlar* 'They cannot become the vessel for good taste'. The new suffix *-UmA-* finds its place among the morphemes of inaction, after the voice formatives. Several instances of positive fused forms of possibility are, however, found even in the (Qarakhanid) QB, in couplets 2870, 3055, 3789 and 4838.

The normal positive counterpart of *-U uma-* is, in Uygur, *-U bol-*, especially when stating not that somebody is unable to do something, but that the action in question cannot be carried out by anybody; Gabain's note to l.1870 of her edition of Ht VII (§ Ic1) quotes the Ht example *örü bolmaz* 'one cannot rise'.

The *-gAlI* form is also well attested with *u-*; e.g. in *udgurgalï sakïntï, n(ä)ŋ udgurgalï umadï* 'He thought of waking him up but was quite unable to wake him' (Maitr Taf 128 v 25) or *körgäli umazlar anïŋ täriŋin* (Ht VIII 41) 'They are unable to see its depth'. Its positive form is less common than the negative: An example for it is *anï näčük utgalï yegädgäli ugay sizlär* (U IV A 77) 'How will you be able to win against him?'; *-gAlI ugay* appears also in TT X 81.

-gAlI bol- and its negative counterpart are similar in content, but are usually meant to hold for any subject; e.g. *bilgäli bolmadï* 'it was impossible to recognize (something)', *tavrak bargalï bolmadï* (Ht V 13a23-4) 'it was impossible to advance speedily', *näŋ olartïn ozgalï ... bolmaz* (BT II 927) 'It is quite impossible to escape from them', *anïn bolur bolgalï yalŋuklarka elig xan* (Suv 562,3-5) 'therefore they can become people's rulers', or *keŋin täriŋin tüpkärgäli ... bolmaz* (BT I A_2 12) 'One cannot fathom its breadth or its depth'. Cf. also BT XIII 4,4 and Ht VII 26 and 47. In *antakï kišilär bir täg äšidgäli boltïlar ... nomlarïg* 'The people who were there were all equally able to hear ... the *sūtras*' (Ht VI fol. 26v) the *-gAlI bol-* sequence has an explicit subject; we find *tä]ggäli boltum* in Ht III 372.[451] The note to HtsBriefe 1870 (§ Ic) quotes some additional 'impersonal' examples but also one in the 3rd person plural.

The DLT apparently replaced *-gAlI bol-* with *-sA bol-*: *tälim sözüg uksa bolmas, yalïm kaya yïksa bolmas* (fol.453) 'One cannot understand blathering words as one cannot tear down a cliff'; *köŋül kimnig bolsa kalï yok čïgay / kïlsa kučün bolmas anï tok bay* (fol.550) 'One cannot make somebody satiated and rich by force if he has a poor man's heart'.

[451] Cf. *körgäli umazlar anïŋ täriŋin* 'They are unable to see its depth' above.

Rabġūzī has the same construction (documented in Schinkewitsch 1926: 79).

The QB, the other great Qarakhanid text, has *-U bil-* like Western Oguz: *bägig kulda adra bilür mü özüŋ* (4836) 'Can you distinguish between lord and servant (after they die)?'; *köndrü bilmäz yorïk* (2077) 'He is unable to correct his behaviour'.

The *-(X)p* gerund is much less common with *u-*; we have it e.g. in *tutup ugay* (Maitr Taf 129 v21 in fragmentary context) or in *özümnüŋ bašgarïp umayokum ärür* (r63 of a colophon published in AbiShōtan p.76) 'this is a case of my being unable to suceed'.

-gU täg ärmäz is another construction expressing impossibility, e.g. in *ögrünč[ümüz] tükäti sözlägü täg ärmäz* (TT II,1 55) 'our joy is quite indescribable'. If the phrase is to express for whom the action referred to is impossible, the subject is referred to by a possessive suffix added to *-gU*: *bo montag tod učuz savlarïn körüp särgüm täg ärmäz* 'I cannot bear to see such vile things (happening to my country)' (U I 41). See section 3.284 for the construction *-gU täg*.

-gUlXk är- also appears to express possibility and ability, but the possibility emanates from the object and not from the verb's subject, e.g.: *alp tüpkärgülük ärür* (BT I D 184) 'It is difficult to fathom'. In *bütürgülük ärmäz ärti* (Suv 602,12) 'It was impossible to bring in order' and *kimkä umug ïnag tutguluk ärti* (Ht VII 1673) 'With whom could one have sought refuge?' the content is transferred into the past. With reference to the subject in a genitive and a possessive suffix added to the *-gUlXk* form we have *adïnlarnïŋ bilgülüki ärmäzlär* (Suv 377,7) 'They cannot be known by others'.

The verb *yaz-* 'to miss' appears to have become an auxiliary in the language of Kāšġarī: He translates *ol anï uru yazdï* (fol.470) as 'He almost struck him'. This appears beside the sentence *ol käyikni yazdï* 'He missed his shot at the game'. It is therefore likely that *yaz-* did not, at that stage, denote unintended actions which nearly happened, but only actions which the subject just failed to carry out. Hence the mention of this auxiliary in the section on ability, here rather inability. Cf. however the DLT's *-gAlI kal-* above.

3.254. Version

The Old Turkic category of 'version' specifies either the subject itself or another entity as the beneficiary of the action referred to in the sentence. The object version or benefactive is in Old Turkic expressed by the converb followed by *ber-* 'to give' as auxiliary, the subject version or self-benefactive by *al-* 'to take' as auxiliary.

al- may signify 'to do for one's own sake', or 'for the sake of the subject's own party'; e.g.: *tokuz oguz terä kovratu altïm* 'I gathered and organised my Tokuz Oguz nation' (ŠU). § 22 of the UW entry for *al-* lists quite a number of verb phrases consisting of vowel or *-(X)p* converb and having the meaning "für sich (tun)", e.g. *tägšürü altï* "für sich getauscht / sich eingetauscht" in Maitr.

The benefactive is quite common with the vowel converb, e.g. *ada öčü(r)gü üčün sakïnč ayu berälim ... ayaglïg bolmak dyan sakïnč üdin ayu berälim ... yäk ičgäklärig okïmak törösin sözläyü berälim* (TT VA 75, 98, 115) 'Let us inform you of the meditation serving the allaying of dangers ... of the time for the meditation by which one gets honoured ... of the ceremony for the invocation of demons'. *ayu ber-* appears with this meaning also in KP 13,2, M III nr.7III, 15,11$_1$, MaitrH XI 3r16 or in the QB, *sözläyü ber-* in DKPAMPb 57. Similarly in a source from the Mongol period (Tachi 49-51): *tört yïŋakdïn bo nom ärdinig keŋürü yada beriŋlär*: 'Be so nice as to spread this doctrine jewel in all four directions'. *körtgürü bergäy ärti kim köni yolča ... yorïzunlar ärti* 'Would he graciously show ..., so that they would take the right road' is from an early text, TT VI 237. In the Manichæan corpus we have e.g. *ïnča kaltï suv ï ïgač kapagïn yerdä ača berürčä ančulayu-ma xroštag täŋri xormuzta täŋrikä beš täŋrikä kapagïn ača berti* (M I 13,9-12) 'Just as water serves plants in opening their aperture in the soil, quite in the same way the god Hroshtag graciously opened the gate of the Fivefold God to the god Ohrmizd'. The sentences *inim äčim ... üčün bäŋigümin*[452] *tikä berti* (E28,7) 'My younger and elder brothers built this memorial for me because of ...' and *balbal kïlu bertim* (BQ S7) 'I erected a stele for (him)' are both from runiform inscriptions. Qarakhanid use is identical: *nägü kïlmïšïŋnï sän adra säčä yora berdiŋ* (QB 797) 'You explained to me your actions clearly and in detail'. *bolu berdi ävrän* (QB 1642) is by Dankoff translated as 'The firmament smiled upon him'; *bolu ber-* just means 'to *be* in somebody's favour'.

In the sentence *ečimiz Sïntar Šalikä bitigäli aydïmïz, "bašlap beriŋ" tep* 'We asked our brother Sïntar Šali to write (it), saying 'do us a favour and start' (Maitr colophon in Gedank) *ber-* governs the *-(X)p* converb and not the vowel converb. The editor translates the direct speech as "Fang gleich an!", where 'gleich' is presumably meant to correspond to *ber-*. His idea would accord with the meaning of *ver-* as auxiliary in Turkish.

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[452] The second vowel is not explicit but is assumed to be there because it is explicit in an instance in the Ongin inscription.

Schönig 1996: 211 (footn.) proposes still another meaning for the auxiliary *ber-* as we find it in the sentence *olorupan Türk bodunuŋ elin törösin tuta bermiš, eti bermiš* (KT E 1, BQ E 3): He suggests it should be translated as "they *began* to organize and rule (the state and institutions of the Türk people)", which is how the sequence *-U ber-* would be translated in a number of modern Turkic languages. This seems a less likely possibility in view of all the examples of vowel converb with *ber-* quoted above, or an example as the following (where 'beginning' makes no sense): *yarlïkančučï biliglig burxanlag kün täŋri kop kamag tünlïglarnïŋ ämgäklig taloy ögüzlärin suguru berzün* (MaitrH XI 9r27) 'May the compassionate Buddha like the sun graciously dry up the sea of suffering of all creatures.' Schinkewitsch 1926: 91 quotes a number of examples of the vowel converb + *ber-* from Rabġūzī and thinks that *ber-* gives them the meaning of completion (the converse of Schönig's idea); I think all of these as well are best understood as having benefactive meaning.

Signifying 'to favour with doing, to deign to do', *ber-* is an auxiliary of politeness in Orkhon Turkic and Qarakhanid. Uygur has *yarlï(g)ka-* instead; see section 5.3 for these and other pragmatic of verbs.

3.26. Aspect and tense

This section deals with the temporal structuring given *by the speaker* either to events within themselves ('aspect') or with respect to other events referred to ('taxis') or with respect to the speaker or writer's moment of speaking or writing ('tense'). All finite indicative verb phrases are, first of all, characterised for aspect and taxis. To express tense and / or taxis, they can be transposed into a (relative) future by the addition of *ärgäy* and into a (relative) past by the addition of the forms of the preterite, *ärtim* etc. Thus e.g. an event referred to by a final-transformative verb ('to have somebody get mounted') presented not as internally structured but looked at from its final point, in past taxis and past tense: *ilinčükä atlanturdï ärti* 'he (the king) had had (him, his son) mounted for recreation' (KP 1,1). The following passage (Wettkampf 26-31) recounts one and the same (iterative) event in two versions differing in aspect: *ol ödün yagï w(o)rm(ï)zt tegin bo tört sav agzïnta tutdï; kanta barsar kälsär kirsär tašïksar olorsar tursar bo tört sav ag(ï)zda tutar ärti* 'Then the valiant prince Wormïzt kept repeating these four terms: wherever he went or came, entered or exited, sat or stood he would repeat these four terms'.

Orkhon Turkic and Uygur differ in the forms they use for expressing the future, *-dAčI* in Orkhon Turkic where the rest of Old Turkic uses *-gAy*. The distribution is a bit different for the negative future: *-mAčI*, the inscriptional form, stays in use in a few early Uygur texts beside positive *-gAy*. A peculiarity of Buddhist Uygur taxis are the proximative forms, absent from Orkhon and Qarakhanid Turkic and from Manichæan sources: *-yOk* and *-gAlIr,* which express vivid past and imminent future respectively. When using these forms, the speaker stresses the relativity of the temporal reference with respect to the point of the event or, more commonly, to the point of speech.

The means used for the expression of aspect and tense, consisting of synthetic and analytic verb phrases, partly overlap with those used for expressing other contents, e.g. the category of actionality or the expression of irreal wishes or conditions. The contents of *-yOk* and *-gAlIr* also have a lot to do with epistemic modality, since speakers and writers using these forms base the degree of 'reality' of past or future events on their perception of their personal present, or the present as presenting itself at the moment of the action referred to.

Stylistic modes of particular texts determine the selection of types of verb phrases used in them or the inventory of forms. Verb form sequences within single sentences can often, in themselves, not be assigned any tense or aspect content; not only because this depends on the semantics of the verb, but also because of dependency on the context. The most meaningful form to deal with the matter is to consider sequences of verb phrases in whole passages. This task, however, demands monographic treatment, not the space we can assign to it here. The following account of tense and aspect in indicative and not indirective verb phrases can only be a rough approximation.

-Ur etc. and *-mAz* usually express imperfective aspect. It is to make this aspect explicit that we find e.g. *šala sögüt tsip sögütkä oxšar ärip* 'the *śala* tree is similar to the oak and ...' instead of *'oxšap'* in Ht III 212, or *tünlïglar anïlayu ok turur ärip sansarlïg kök titigdä* (Abhi A 41b5) 'creatures remaining in that way in the green mud of *saṃsāra*' instead of *'turup*'. By itself, the aorist often refers to the time of speech or writing; just as often, however, it is timeless, as in inscriptional *yerimin suvumun konar köčär bän* 'I alternately settle and migrate in my domain'. The aorist – the form *ornanmaz* in the following example – can also describe a state of affairs which started out at some point in the past and still holds: *ïnča sakïntïm ... mini ... dendar kïlgay siz tep. ïnčïp amtïkatägi mäniŋ köŋülüm näŋ ornanmaz* (TT II,1 40) 'I thought you

would ... make me into an elect. Till now, however, my heart has not been calming down'.

In some contexts more than others, the temporal scope includes the future. The Maitrisimit, which narrates the future appearance of Buddha Maitreya in great detail, chooses the aorist as main narrative form, e.g. *maytri burxan ... sinxï elig xanka ïnča tep yarlïkayur* (Maitr 26A r9-10) 'Buddha Maitreya will speak to king Siṃha as follows:'. The reason for the use of the aorist in such prophesy may be the perception of predetermination, or an expression of the experience of the seer.[453] In some cases, some of the events related are, of course, intra-terminal: *yer suvlar ... täpräyür kamšayurlar ... täŋri yalŋuklar ... yïgïlurlar ... kuvrag yïgïlmïšta ken turum ara ulug tigi čogï ün kügü eštilür yugant üdtäki täg ulug bädük ot yalïnlar közünür* (MaitrH XX 1r2-13) 'The worlds ... rock and shake ... gods and humans assemble ... After the multitude is assembled, great roars and sounds are suddenly (= *turum ara*) heard. Great and high flames as in the *yugānta* age are (or: become) visible.' Nor is there in the quoted example any formal differentiation between imperfective and perfective on the sentence level, between temporal frame and single event, e.g. concerning the great flames which are either a visible background or which become visible as a member in a chain of events. Interrogative reference to predicted events also uses the aorist: *ken kältäči burxanlar burxan kutïn kanta bulïrlar?* 'Where will the future Buddhas attain Buddhadom?'. When, in U II 31,49, we read of Indra asking (himself?) the question *bo täŋri urïsï kayu yeti ažunlarïg täginür ärki* 'Which seven existences will this divine boy experience, I wonder?', he (and the intended readers) know that he has immediate access to the answer. A present reality of the future is implied also by *tägir* in the following instance, an address to a sort of oracle: *yanturu öz ulušum[ka] barïp adasïz äsän tägir ärsär män, bo xwalïg psak bod[isatv]nïŋ ïdok elgintä turzun* (Ht III 919) 'If I am to return to my own country and arrive there safe and sound, may this wreath cling to the *bodhisattva* (statue)'s holy hand'.

Imperfectivity is transferred into the past by the constative preterite of the copula, e.g. *ančulayu amrar ärti sizni tüzügü anasï[n] b[alasï] oglanï sävärčä* (Pothi 98-99) 'they all loved you as children love their mother' or *ymä bir kün bo tagda [öt]mäk aš ašayur ärdim. [ötr]ö üč*

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[453] The aorist has of course become the normal future tense in many modern Turkic languages, new forms having been created to describe events going on at the moment of speaking or during the point of time being referred to. This process did not, however, as yet take place in Old Turkic, where the *-Ar* form is a real 'aorist' not yet seriously challenged by more focussed present forms such as *-U turur*

ävrän yïlan [kälti]lär 'Well, one day I was eating bread and food on this mountain (and) three dragons came towards (me)' (DreiPrinz 42). There are many other examples in UW 400b-401a, § 17b of the entry on *är-*. The sequence is common already in Orkhon Turkic, as *köl tegin bir kïrk yašayur ärti* 'K.T. was 31' (KT), *türk bodun tabgačka körür ärti* 'The Türk people were subject to China' (Tuñ), *atïg ïka bayur ärtimiz* 'we used to tie the horses to trees' (Tuñ) and the like.

The second sentence in *ötrö otgurak katag köŋlin örgünintin kuďï enti. enä ïnča tep sav sözläyür* (Maitr XV 13r12) 'Then, in a clear and resolute mood, he descended from the throne. Descending he speaks the following words:' clearly refers to the past not less than the first and is not less narrative: It is put into the present to encourage visualization.

In *mitri burxan kälgäy tepän küdügli ärtiŋizlär* (M II 6,10) 'You have been waiting for the prophet Mithra to arrive' we have the participle in *-(X)glI* with the preterite form of the copula; this rare instance is presumably synonymous with the aorist construction.

The constative preterite (i.e. the one not explicitly marked as evidential) is expressed by members of the paradigm *-dXm* etc.; used by itself, this form normally expresses anteriority relative to the moment of speaking or writing. The form is exceedingly common; Zieme 1969: 148 determined that its frequency in his corpus compared to that of *-mIš* is roughly 10 : 1. The simple constative preterite serves the narrative mode, as even processes which obviously took some time can be presented as point events: *otuz yašïma beš balïk tapa sülädim* (BQ E28) 'In my 30th year of life I campaigned against *Beš Balïk*'. In *türk bodun üčün tün uďïmaďïm küntüz olormaďïm* 'For (the sake of) the Turk nation I did not sleep at night, nor did I rest in daytime' (BQ E22) there is (metaphorical) reference even to repeated situations. Zieme 1969: 148-9 lists numerous Manichæan examples for the constative preterite.

When a verbal lexeme denotes a process, its preterite can express the state reached in its culmination. Thus with the verb *ač-* 'to become hungry'[454] e.g. in BT XIII 2,36: *"ay baba, yemiš [ber biziŋä], ačďïmïz ikägü" tep [tedilär* '"Oh dear, [give us] food, we are both hungry" they said'. Similarly with indirective status: *botočaklarïmnïŋ karnï ačmïš* 'My dear little camel colts have evidently gotten hungry' (BT XIII 2,39).

In the following example the *-d+* form refers to the future, presented as something which has 'practically' already taken place, to signal a

[454] It had a long vowel, unlike the verb *ač-* signifying 'to open'. For the semantics cf. Turkish *acık-*; *acıktım* 'I am hungry'.

clear intention (in fact a lie; the speaker intends to do something quite different): *azkya öŋrä yorïyu turzunlar; män una basa yetdim* (Suv 615,14) 'Please walk on a bit; I will have reached you in a moment!'. The use of the presentative particle *una* is meant to support this intention. TT I, an oracle book, has some sentences in which a conditional is followed by a *-d+* form: *äd tavar tiläsär bultuŋ taptïŋ* (TT I 11); *täpräsär alkïntïŋ; täprämäsär yägäd(d)iŋ* (TT I 204-5). These can be translated similarly, as 'If you are in pursuit of possessions you will soon have them' and 'If you move it will be your undoing; if you don't move you will have won'. The use of *-sAr* does also, grammatically speaking, allow these to be references to the past: 'When you were in pursuit of possessions you got them' and 'When you moved you were undone; when you didn't move you prevailed'.

The preterite in *-dXm* etc. is followed by *ärti* e.g. in *sintu ögüz suvïn käčär ärkän bir yük nom suvda kaltï ärti. atïn bitip ïdtïmïz kim ken kältäči arkïš* ... (Ht VII 2048) 'While we were crossing the waters of the Indus river, a load of holy books had gotten lost in the water. We have written down and sent their names, so that a messenger coming later (can bring other copies)'. This pre-preterite appears also in *tiši tïnlïg birlä yazïntïmïz ärdi; ol ayïg kïlïnč küčintä ulug tamularda [tugdumu]z* (MaitrH XX 14v16) 'We had sinned with female creatures; as a result of that sin we were born in the large hells'. Another instance containing the particle *čak* is quoted from the Hami DKPAM ms. in section 3.341 below.

Finite *-yOk,* in use only in Buddhist Uygur, expresses a vivid view taken of the event after it took place and implies the speaker's notion and communicative intention that the event is relevant for the moment of speech; we have therefore called the form 'vivid past'. Hence we find it used exclusively in quotes of direct speech. The event referred to has generally been directly observed by the speaker. The sentence *bašïmazdakï kara sačïmaz učï bölöki kïrgïladyok ol* (U III 55,16) 'The black hair on our head – its ends and dividing line have become grey' is uttered by hunters whose hair instantly turns grey upon receiving the order to kill a saintly *bodhisattva* elephant against their conscience, or face the murder of their own families to the 7th generation. A mother who learns of her son's decision to sacrifice himself says *ikinti ažunta bargalï sakïnyok sän* 'you have just decided to go to another existence' (U III 48,6). The sentence *ataŋ ... saŋa yakïn kälyök ol* (U III 64,5) 'Your father ... has approached you' is said about himself by a father come to murder his son. *"bo montag tül tüšäyök män" tep sözläyür ärdi*

(U III 54,15) '...”I have had such and such a dream”' is what queen Bhadrā asserts whenever she needs an excuse for the sin she is about to propose to her addressee; the 'dream' is meant to serve as a justification for the proposal. *män ... tilkü ažunïnta tugyok män* (PañcFrag 47) 'I have been born a fox' thinks the fox, going on to reflect on what his nature enables him to do about the situation he is confronted with, as distinct from what other animals can do: The birth evidently did not take place in the immediate past, nor does it need to be asserted, but it *is* relevant for the matter at hand. The sentence *“bulyok mu ärki burxan kutïn azu bulmayok mu ärki” tep tegülük* (BT I D 195) 'One should say “Has he just attained buddhahood, I wonder, or hasn't he?” proposes to see the event as a drama of current significance; it is important for showing that *-yOk* is compatible with the epistemic particle *ärki*. *nom bitiglärin tälim yïgyok män* (Ht V 59) 'I have collected his spiritual writings in great quantity' says Xuanzang in India when he worries that it will be difficult to have then all transported to China. *amtï sizlär [... ä]mgängülük oronka kälyök [s]izlär* (Höllen 14-15) 'Now you have just arrived at the place of suffering' is what visitors to some part of hell are told in a Divine Comedy-like tour. A passage in TT X 336 further highlights the use of the form by pinning it against the aorist: *körgil amtï yäklär bägi vayšir(a)vani a! ... on küčlüg täŋri burxan atavakï yäkniŋ ornïnta täpränčsiz yarp oloryok ol. ... ančakya ymä korkmatïn äymänmätin olorur. yavlak sakïnčlïg atavakï yäk iki közintin ört yalïn [ü]ntürüp täŋri burxan üzä ïdu turur* 'Look now, Vaiśrāvana, lord of the demons! The divine Buddha ... has seated himself, immobile and firm, at the place of the demon Āṭavaka. He is sitting there, without a bit of fear or anxiety (while) the evil-thinking demon Āṭavaka keeps emitting fire and flames from his two eyes and sending them at the divine Buddha'. The use of this form is discussed and further documented by D.M. Nasilov 1966.[455]

The vivid past can be transferred into the past: “*ol är nätäg osoglug körklüg mäŋizlig ärdi?” subatra tiši yaŋa ïnča tep tedi: “karaža ton kädyök ärdi.”* (U III 57,8$_1$) '“How were the looks of that man?” Subhadrā, the female elephant said as follows: “He had put on a monk's gown”'. The vivid past participle has to be used because *käd-* signifies 'to put on' and not 'to wear' and because the way the person referred to was dressed is relevant for current action on the part of those involved in the story's drama. The sentence *sansardïn ïntïn yoguč ärtyök ärdi,*

[455] He also points out that it survives in just this function and meaning in Hakas and Tuvan; Elisabetta Ragagnin can document it from Dukha, a variety of Tofa spoken in Mongolia.

kïlyok ärdi alku kïlguluk išlärin, alkyok ärdi az ulatï nizvanïlïg ayïglarïg (U III 88,3-4) 'He (the *arhat* Upasena) had just reached the bank beyond *saṃsāra*, had just accomplished everything he had to do and had just done away with lust and with the other evils of passion' has a similar *-yOk ärti* phrase. It does not appear in direct speech but the vivid past content is highly relevant to the point being made: Upasena lies down and then, suddenly, his brother Sena, reborn as a snake, comes and stings him, instilling his deadly poison.

Followed by *är-miš*, the *-yOk* form gets coupled with indirectivity, as in Suv 8,10: *ïnča tep tedilär: "ay [är]-a! bizni sini algalï [ïd]tokda ašnuča an bitigdä körtilär. an bitig ičintä sänin öz yaš sanï sakïšï takï tükämäyök ärmiš. täk sän munča munča tïnlïglarïg ölürtmiškä ol sänin öz alïmčïlarnïŋ ugurïnta anïn sini [alg]alï ïdtïlar. munï sän bilmiš [kärgäk]" tep tedilär* 'They said the following: "O man! When they sent us to fetch you they first looked into the judgement register and *it turned out* that your time to die hadn't come yet. They sent (us) to fetch you only because you have caused the death of so and so many living beings, and for the sake of those to whom you owe lives"'. The relevant sentence is marked as a quotation through *ärmiš* but, since it emanates from divine prescience, is nevertheless able to refer to the moment of speaking. Note that all the examples have the 1st or 2nd person as topic, even when the subject is the 3rd person.

The perfect participle in *-mIš* usually links with the copula to give verb phrases with perfect, i.e. post-terminal meaning. *-mIš* followed by *ärür* (or *ärmäz*) and personal pronouns expresses the 'normal' post-terminal or present perfect. This type of verb phrase should not be confused with the indirective (for which see section 3.27), which always consists of *-mIš* without the aorist; e.g. *altï yüz tümän yïl ärtmiš ärür* 'six million years have passed'; *toyïn bolmak küsüšin maŋa yakïn kälmiš ärürlär* (MaitrH XVI 1v3) 'they have approached me with the wish to become monks'; *kün täŋri tugmiš ärür. ... odunuŋlar* 'The sun has risen ... Wake (pl.) up!' (MaitrH XV 11v22); *anïn ... yeläyü at atamiš ärür* (BT I B(128)) 'Therefore there have been given fake names' or *män xwentso öŋrä änätkäkkä barmišta alp adalïg yolta ür keč ämgänmiš[kä] iglig kämlig bolmiš ärür män* (Ht VII 1035) 'As I suffered hardship on the hard and dangerous road when I, Xuanzang once went to India, I have become sickly'. In the following question and answer, the question consists of a *-mIš* form while the answer has *-mIš ärür*: *nägüniŋ kučintä bo agulug yïlanlar bo montag körksüz ažunta tugmïšlar? otgurak uktï: övkä nïzvanï kučintä munta tugmiš ärürlär* (MaitrH Y 174-6) 'Due to

what causes have these poisonous snakes been born into such an ugly existence? He understood it clearly: They have been born into it due to the vice of anger.' *tugmïšlar* in the question appears to expect an indirective answer: The questioner would be content with second hand information but is offered first-hand post-terminal information. This passage exemplifies the close association of indirectivity with post-terminality.

The content of *-mIš ol* is not indirective either; it is hard to say in what it differs from *-mIš ärür*: *täŋri kïrkïnlarïn täŋri ogulanlarïn alkamïš törütmiš ol* (BT V 175) 'He has created the divine maidens and divine youths'. Several additional examples of this are found in Ht V 126-133, e.g. plural forms in *kök täŋri yaŋïn kïlmïšlar ol ... üd kololar etigin yaratmïšlar ol* 'They have done it according to the manner of the sky ... have created instruments for (measuring) time units'. This is not the indirective as Xuanzang is describing what he saw in a country he visited. We find the phrase in a relative clause in *kïsgač kim käntü ol ok tämirän etilmiš ol* 'tongs, which are themselves made of that same iron' (M I 7-8). In *tört yïŋak [ye]tirär maŋ turkï yer[tä e]diz lanxan tartmïš ol* (Ht III 901) 'They have erected a high fence in a distance of seven steps on all four sides' and *ol yarok yašuk važïr öŋlüg alkatmïš yer ... beš bölükün bölmiš ol* (BT V 188-191) 'That bright and shining praised land with a diamond appearance is divided into five parts' one would expect *tartïl-* and *bölül-* if these were normal finite phrases. These two instances and perhaps also the one in the Manichæan (M I) relative clause were perhaps perfect participles in predicative but still nominal use.

There is a periphrastic construction consisting of the perfect participle in *-mIš* with possessive suffix referring to subject followed by *bar*: *mäniŋ ymä burxan kutïŋa küčlüg küsünlüg köŋül öritmišim ... bar* (MaitrH X 3r7) 'It has happened that I was strongly aroused towards buddhahood ...'; *sizlärniŋ tüzün yavaš köŋülüŋüzlärni artatmïšïm bar är[sä]r* (DKPAMPb 643) 'If I happen to have corrupted your noble and mild hearts, ...'. Nominal subjects accompanying the *-mIš* form appear in the nominative; note the 3rd and 1st person possessive suffixes referring to these subjects: *öŋrä ymä bodisavtlar munčulayu ärdini bušïka kälmiši bar ärti* (KP 49,1-2) 'It had happened before as well that *bodhisattvas* came in this way to ask for jewels for (giving as) alms'; *män xwentso äšidmišim bar* (Ht VII 218) 'I Xuanzang have heard (the following)'. If the *-mIš* form had been purely nominal and this had not been an analytical form, the subject could have been in the genitive.

The contexts do not warrant any interpretation of this construction by which these nominatives would be instances of left dislocation.

The perfect is transferred into the past by the addition of the preterite of the copula, giving a pluperfect; examples are *vipaši atlïg burxan yertinčüdä bälgürmiš ärdi* 'The buddha called V. had appeared on earth' or *üküšüg ötgürmiš topolmïš ärdilär* (Ht VIII 55) 'They had penetrated a lot (of texts)'.

The perfect can also be transferred into the future, as e.g. in *bulunčsuz törökä täginmiš ärgäylär* (TT VI 429) 'They will have realised unattainable *dharma'*. Elsewhere the sequence *-mIš ärgäy* expresses presumption (discussed in section 3.27).

A speaker using a future form referring to a point in time subsequent to the time of speaking is exercising a judgement on an event which has not yet taken place. Its use therefore implies the choice as marked member of the epistemic modality category. The future tense is expressed by the suffix *-dAčI* in the runiform inscriptions of Mongolia, by *-gAy* in other Old Turkic sources. Finite *-dAčI* is negated as *-mAčI*, e.g. *ölmäči yitmäči sän* 'you will not die and not disappear' (ŠU E 9); further examples appear in Tuñ IE6 and Ongin R2. We have *-mAčI* also in early Manichæan and Buddhist Uygur, e.g.: *kačan näŋ äzüg sözlämäči män* (Maitr 11 r11) 'I will by no means ever tell lies'; *kök kalïgdïn kozlug yagmur [yagdokïn közin] körgäy sizlär; ät'özin ol ämgäk tolgakïg täginmäči sizlär* (MaitrH XX 1v3) 'You will see with (your) eyes how rain of embers falls from the sky (but) with your body you will not feel that pain.'[456]

The inscriptional future taxis is transferred into the past tense by the preterite of the copula, e.g. *Türk bodun adak kamšattï, yavlak boltačï ärti* (BQ E31) 'The Turk people tottered and were about to be routed'; *bunča ymä tirigi küŋ boltačï ärti, ölügi yurtda yolta yatu kaltačï ärtigiz* (KT N9) 'All these (my mother the queen, my mothers,[457] elder sisters, daughters in law and princesses) who would survive would become female slaves and the dead among you would be left lying in deserted camps and on the road'. Then there are instances in the main clauses of irreal conditional sentences: *köl tegin yok ärsär kop öltäči ärtigiz* (KT N10) 'If K.T. did not exist you would all have eventually been killed'. *yok ärtäči ärti* (Tuñ 54-55) appearing in the same construction is

[456] The editors mistakenly 'emend' the *-mAčI* form to *'täginmädäči'*.

[457] I do not think this refers to 'step mothers' as Tekin would have it; with the possessive suffixes on mothers, elder sisters etc. the prince probably refers to all females in his tribe.

quoted in section 4.64 below. Uygur has numerous sequences of *-dAčI ärti* (examples are quoted or mentioned in UW 404b, §22b of the entry *är-*) but in all of them the *-dAčI* form serves as present participle and is not part of an analytical phrase. Verb phrases with the shape *-gAy ärdi* which I have come across do not, on the other hand, indicate a point in time which is in the speaker's future or a point of time in any relationship at all to the time of narration, but appear in modal constructions (see section 5.1). This may be a coicidence, or the task of inscriptional *-dAčI ärti* may in Uygur have been filled by the phrase *-gAlIr ärti*, of which we quote an instance in the next paragraph.

Uygur and Qarakhanid have an 'imminent future' expressed by the suffix *-gAlIr*. E.g. *aglïk kurug bolgalïr* 'The treasury is about to get empty' (KP 7,7); *alko išläyü tükädimiz. yenä ymä kün täŋri uyakgalïr. amtï käntü käntü ärgülük [ä]vkä baralïm* 'We have finished all our work. Moreover, the sun is about to set. Now let us each go to the houses we are to stay in' (Maitr 12v2); *ya kurup ok atgalïr* (TT I 162) 'He is bending his bow and about to shoot an arrow'. In Qarakhanid we have the form in two couplets: *sävinč arzu ni'mät turu kalgalïr / sakïnč kadgu miḥnät maŋa kälgälir* (QB 1074) 'Joy, desire and happiness are about to stay away; trouble, sorrow and affliction come my way'; *seziksiz ölüm bir kün axïr kälir / tirilmiš bo janlïg janïn algalïr* (QB 1472) 'There is no doubt that Death will one day come; he will soon take the soul of this living being'. See section 3.285 for infinite uses of this form; the imminent future expressed by *-gAlI är-* (see this in section 3.251) may be its source.

Transposed into the past we get, e.g., *utr[u] tïdgalïr ärti; anï üčün tïdmadï*[458] (ZiemeTexterg r5) 'He was about to oppose and hinder him; that is the reason he didn't do so'.

Uygur uses *bol-* 'to become' (for which see section 3.29) with the perfect participle in *-mIš* for presenting the activity as a transition of the subject into a new state: *nomlayu yarlïkamïš boltï* 'he has deigned to preach', *on törlüg ädgü kälïnčïg kälmïš kärgäk; ögiŋä kaŋïŋa utlï sävinč tägürmiš bolur* (BT XIII 12,036)[459] '(They) should carry out the ten types of good deeds; (they) will have given pleasure to their parents' or

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[458] The ms. (Manichæan writing) has *tïdmzdï*, which I take to be an error; it might indicate that the ms. was copied from a source in Uygur script, where Z and ' can be similar.

[459] The editor pieced this sentence together from mss. B and C; that it should be attributive to *šlok* 'verse' (as he thinks) seems unlikely to me.

dyan at üzä körkitmiš boltï 'he has thus presented them by the *dhyāna* name' (Buddhist); *yerni mä karï kišini unïtmiš bolgay sän* (UigBrief C11-12, a letter) '(If you do not come to see us but stay where you are), you will find that you have forgotten your place and your old family'.[460] In Manichæan texts there appears to be a resultative present perfect with *bol-* in the preterite, where *är-* in the preterite would have given past perfect meaning: *ymä agïzlanmïš boltï [ulu]g ögrünčün, ymä bitil[miš] boltï agïr sävinčin* 'and it has been pronounced with great joy and written down with overwhelming happiness' (M I 25,3-5); *sizlär anï üčün okïtmïš boltuŋuzlar* (M III nr.7 III r5) 'You have been called for that reason'.

Let us sum up what we have found to express tense and aspect in finite indicative non-evidential verb phrases. There are five simple forms: The imperfect aorist, the preterite, the perfect base *-mIš* / *-mAdOk*, the future *-dAčI* / *-mAčI* or *-gAy* and, in Uygur, the vivid past *-yOk* and the imminent future in *-gAlIr*. All these are also found transferred into the past by the preterite of the copula. *-mIš* is in a special situation as it needs the pronoun *ol* or the form *ärür* for serving as predicative perfect verb form; without one of these it would be confused with its homophone expressing evidential past. Perfect *-mIš* / *-mAdOk* is also unique among the simple verb forms in (at least once) getting coupled with *ärgäy* to express taxis, and also with *boltï*, *bolur* or *bolgay* to form verb phrases: *-mIš boltï* was found to express a present perfect while *-mIš bolur* and *-mIš bolgay* give future perfect meaning.

3.27. Status and epistemic modality

Many languages of the world, among them modern and ancient languages of northern Eurasia including all the Turkic ones, possess a category which has been called 'status', expressing whether the information which the speaker / writer supplies to the addressee reached his (the speaker's) consciousness directly or indirectly. The speaker / writer using a marked member of this category indicates the way by which the information reached his or her attention. This category should by no means be confused with epistemic modality, which expresses the speaker's opinion on the reliability of the content of his utterance: The

[460] Concerning the translation of *kiši* as 'family' cf. *my people* 'my family' in spoken English. *kiši* 'person' with possessive suffix apparently also acquired the meaning 'wife', but that was probably a result of narrowing of the meaning 'family'; Arabic *ʿayāl* 'family' also came to mean 'wife' in many Turkic languages

'status' category does not itself say anything on reliability. There may, however, be some inferences in that direction on the part of the addressee (whether intended by the speaker / writer or not), which is why we are dealing with the two categories in the same section. We will first give a short account of status and then of epistemic modality as we find them realised in Old Turkic sources.

Old Turkic indirective status is normally expressed by the verb form *är-miš* added to nominal or verbal sentences. When referring to past events, however, *ärmiš* is not added to preterite forms; instead, the verbal suffix *-mIš* (also serving the perfect participle, with which indirect status is related both by function and meaning) replaces the preterite element *-d* (+ possessive suffixes). In this, Old Turkic is similar, to Turkish, e.g., and (with some phonetic changes) to Yakut. Status is not an obligatory category in Turkic, which means that the use of a directive form like *-dI* does not guarantee that the addressee has actually witnessed the unfolding event. When the content is negative, *-mA-dOk* is used in most of Old Turkic instead of *-mIš*; the use of *-mA-mIš* sets in only in rather late Old Turkic. The reasons for this suppletion may lie in content: Evidentiality is the perhaps oldest function of the finite *-mIš* form in this language, and an event which did not take place can have produced no evidence.

The contents of a message can be indirective in one of three ways, in Old Turkic as elsewhere: Most prominently in the Old Turkic documentation, a person or persons different from the speaker may be the source of the information being transmitted by the speaker, the so-called 'reportive' function; this may refer to matters placed in the past, the present or the future with respect to the speech act. Secondly, the speaker may have inferred the content of his utterance from some evidence forthcoming either during the occurrence of the event or, more commonly, surviving the event after it was completed. This 'inferential' or 'evidential' function has often been taken to be the central or at least the primary one as far as Turkic languages are concerned, as the *-mIš* form is also the perfect participle,[461] and as the perfect in fact sums up a wrapped-up event from the vantage point of its contribution to the present or to some other state following its completion. It is important to state straightway that Old Turkic *-mIš* cannot by itself be used as a finite perfect (or 'postterminal', to use Johanson's clearer term). Thirdly there is the 'mirative' function of the indirective, where the speaker does, in fact, himself witness the event he is reporting on, but registers

[461] The identity of the two forms extends to the feature that both are, in Old Turkic, replaced by *-mAdOk* when negated.

it with surprise, as his mind was not in any way prepared for this particular event. This is still indirective, in that reality in a sense belies the picture which the speaker / writer had made of it for himself, the former abruptly superimposing itself upon the latter. All uses of the indirective essentially include implicit reference to a foreign viewpoint, emanating from the event itself or from some other focus of consciousness.

In *öŋrä nä bar ärmiš tepän biltimiz, täŋrili yäkli nädä ötrö süŋüšmiš, yarokli karali kalti katïlmiš, yerig täŋrig kim yaratmïš tepän biltimiz* (Xw 134-6) 'we know what there was before ..., for what reason god and demon fought, how light and darkness were mixed (and) who created the earth and the sky' the speakers do not (pretend to) have any postterminal evidence for the contents of the subordinated sentences; rather, they were told about it by others. Similarly in ... *bulmaz ärmiš tep sav äšidti* (Suv 621,20) 'She heard the news that they were not finding ...', where the object proposition is verbal, with present taxis. Cf. further *edärür ärmiš* in *az ïnaru barm[ïš], bir ögü[r]*[462] *muygak kör[miš], ymä muygak sïgunug uvu[tsuz bi]lig üčün edärür ärmiš. bo bälgü körüp ymä ... ïnča tepän aymiš* (M I 35,7) 'He went a bit further and saw a herd of female maral deer. A female maral deer was pursuing a male for sex. He saw this omen and ... asked as follows:'.

When reportive *-mIš* appears in questions, the addressee is expected to give a merely reportive answer, as in *bo tïnlïglar nä ayïg kïlïnč kïlmïšlar ärki, kim bo montag ažunta tugup ...* (MaitrH XX 1v20) 'These creatures, what sins are they said to have committed, that they are born in such an existence and ...'. Reportive past perfect gives *-mIš ärmiš: antag ešidmišim bar: mahapračapati gautami hatun ... tapïnmiš udunmiš ärmiš (tep)* (MaitrH III 1b17) 'I have heard the following: Queen Mahāprajāpatī Gautamī had done obeisance to ...'.

The inscriptional sentence *"karlok ešiŋä kälmädök" tedi.* signifies 'He said "The K. are said not to have come for service"', to judge by its context. This is an example for the negative counterpart of indirective *-mIš*: The Karlok are absent.

In the following example, on the other hand, *ärmiš* is added to the predicative verb form to signal mirativity: *ančama mäŋi, ančama ädgü asïg tusu, ančama ädgü kut kïv kim mäniŋ ävimtä barkïmta burxanlïg kün täŋri tugar ärmiš* (MaitrH XI 3v11) 'Such happiness, such good favour, such good luck and blessing that – it turns out – sun-like Buddha is being born in my home'. Similarly, the little mouse which

[462] The editor here writes *ökü[š]* 'many', which seems quite unlikely.

climbs on top of a pot in Ht VIII 391 and then says: *sumer tagka agtïnmak alp ärmäz ärmiš* 'It turns out it isn't difficult to climb mount Sumeru'. Such surprise can also apply to the 1st person (as it also can in modern Turkic languages), e.g. in the following passage (U I 8-9, Magier): *biz*[*iŋä*] *tapïngu yüküngü ärdini berüp ärmiš. biz tapïnguka tägimsiz ärmiš biz; bilmätin kudugka kämišmiš biz* ''It turns out that he has given us a jewel to worship (but we were unworthy of it). It turns out we are unworthy of worshipping (Jesus Christ); unwittingly, it appears, did we throw it (i.e. the stone which he gave us) into the well'. Little Jesus had given the three kings a stone which they had found too heavy to carry and, unaware of its value, had thrown into a well, whereupon a blaze reaching all the way to the sky came out of the well. With nominal predicate we find *amranmak nizvanï ät yedäči kan ičdäči yäk ičkäklärdä ymä üstünräk yavlak ärmiš* (DKPAMPb 152) 'The passion of lechery is – as I now see – worse than demons and vampires eating flesh and drinking blood': The pupil discovers a 'truth' already known to his addressee who is his teacher. When saying *bo nä amgäklig yer ärmiš* (KP 4,8), for instance, the Good-thinking Prince expresses his surprise that the world, as he comes to discover it, turns out to be such a place full of suffering. The nominal sentence *män kololadokum kamagdä ärklig yultuz ärmiš* (l.5-9 in ms. TM 342 = U 5) 'What I have discovered is that stars turn out to be the mightiest' has a sentence as comment (or 'predicate'). This subordinated sentence is the result of the speaker's observations, what he finds out and presents as their result, what has become evident to him but is not evident to his addressees. In Ht VII 199-201 the (in this case perhaps rhetorical) surprise appears to come by reading: *[okïyu] tägindim täŋri xanïmïz yaratmïš sudurlar šastrlarnïŋ swö bašlagïn: yarumïš ol öŋräkilärniŋdä, ärtmiš ol amtïkilarnïŋda* 'I have respectfully [read] the preface to the *sūtras* and *śāstras* composed by our divine ruler: It turns out that it overshadows those of the previous ones (i.e. the previous authors) and surpasses those of the present ones'. This points at the pragmatic use to which mirativity is put.

Old Turkic clearly distinguishes between epistemic modality and what is conceived of or presented as (in)ability, unlike Western European languages which use the verb 'can' in both functions. In Old Turkic, (in)ability is expressed by the verb *u-(ma-)* and by verb phrases of the shape *-U bol-* and *-gAlI bol-*; these do not serve epistemic modality. In this language, epistemic modality is communicated through other

analytical verb constructions, through various simple verb forms and through particles.

There are two particles expressing the speaker / writer's attitute towards the likelihood of the content of a proposition, both excellently documented: *ärki* in the UW and *ärinč* e.g. in T.Tekin 2000: 160-161 for the inscriptional instances and tbe UW for the Uygur ones. Parts I and II of the UW entry for *ärki* deal with the interrogative uses of this particle, especially in the sections m) – o), which refer to nominal sentences and sentences with the aorist and the constative preterite; in section p), which documents uses of *ärki* with forms expressing the future, its meaning is mostly 'hopefully'. The epistemic meaning of *ärki* can be translated to English as 'clearly' or 'apparently' or 'perhaps'. *ärinč*, on the other hand, signifies 'surely', 'probably' or 'no doubt'. Runiform instances accompany forms in *-mIš* (and its negative counterpart *-mAdOk*) or the preterite and there is one nominal sentence; Uygur also has, in addition to the mentioned verb forms, aorist and future instances. In all of these, *ärinč* is the last word of the sentence. This is often also the case with *ärki*; the rule for that, however, appears to be that it immediately follows the predicate or comment, whether that is at the end or not. *lA*, a particle which, according to DLT fol.538, was used by the Oguz, is assertive: See section 3.341 for it.

The verb *bol-* sometimes has a content which is marked within the epistemic category, when it signifies not 'to become' but 'to tend to be' or 'to be expected to be': thus in the sentence *bramanlar küvänčlig bolurlar* (TT X 474) 'Brahmans are normally arrogant'. The sentence *muntada ymä muŋadïnčïg nägü bolgay* (Maitr 26A r4) can be translated as 'What could be more wondrous than this?'; this instance of *bol-* does not signify 'to become' either: The sentence amalgamates interrogative with dubitative content, the latter being expressed both by *bol-* and by the future form. In the following sentence we appear to have the *-sAr* form, the most prominent function of which it is to form conditionals, used for expressing doubt, an epistemic content; the stem is again *bol-*: *kim bolsar*[463] *bo yer suvda ol tülnüŋ tüzü tükäti tüšin sözlädäči* (MaitrH XI 3r13) 'Who on this earth might it be who could fully express the import of that dream?'

In the Orkhon Turkic sentence *Türk bodun, ölsüküŋ* / *ölsükü̈g* (KT S6, S6-7 and N5) 'Oh Turk nation, you are bound to die', certainty about the future is expressed by a form consisting of the necessitative

[463] The second syllable of this word is quite unclear on the facs. and could in fact be *-gay* and not *-sar*. Q and S on the one hand, Y and R on the other, don't look all too different and not much remains in the ms. anyway.

participle in *-sXk* together with the possessive suffix of the 2nd person referring to the subject.

The primary meaning of the *-gU täg* construction discussed at the end of section 3.284 is to qualify an entity as 'suitable for the activity denoted by the verb'. In Middle Turkic and some Siberian Turkic languages it came to express conjectures and fears that the activity denoted by the verb would take place; an Uygur example for this meaning, which makes the construction relevant to epistemic modality, seems to appear in *yetgü täg kälir oglanïg* (BT XIII 2,44) which, in its context, signifies '(someone) could come and might lead the children off'.

Uygur has an analytical construction for expressing that the speaker considers the realisation of a certain proposition unlikely: The verb is put into a phrase of the shape *-gU+sI yok*, the subject staying in the nominative; e.g. *ig toga ketgüsi yok* (U I 45,4) 'It is not expected that the illnesses will disappear'; *mäniŋ köŋülüm yüräkim [..] sintädä öŋi ketip bargusï yok* (TT X 466) 'It is [quite] unlikely that my heart should abandon you'. *sïggusï yok ärdi* 'it could not be expected to fit in' shows the same analytical construction transposed into the past. *-gUlXk+I yok* is used in the same way, e.g. in *muntada yegädip utup üstün bolgulukï yok* (PañcFrag II 55) 'There are no chances of them to prevail and overcome (them)':

ärgäy, the future form of the copula, may express presumption: *amtï čaštanï elig közünmäz bolup bardï; kalïn yäklär tägirmiläyü avlap altïlar ärgäy* (U IV A 233) 'Now king Caṣṭana has completely disappeared; the numerous demons have crowded around him and *will* have captured him'. Such a presumption can be linked with a rhetorical question, as in the following instance of direct speech: *ay ulug elig bäg! män montag montag sav äšidtim. bo nä sav ol?! azu biziŋ amrak ögökümüz äŋ kičigi mahasatvï*[464] *ïčgïnmïš ärgäy mu biz?* (Suv 622,11) 'O great king! I have heard such and such news. What matter is this? *Might* we possibly have lost Mahasattva, our dear beloved smallest one?' Röhrborn (UW 402a, §18c of the entry for *är-*) thinks these instances must be errors for *ärki* but it is not good philological practice to assume an error to have taken place over and again in the same word. A future form would not be unreasonable in view of the English translation, German '*werden* ihn gefangen genommen haben' and Turkish 'esir etmiş *olacaklar*'. See section 3.343 for a proposed

[464] In his edition of this text, Kaya adds a *g* not found in the ms. to make this into an accusative form; this is not necessary as Old Turkic proper names used as direct objects can also be in the nominative case. The *ï* is part of the name.

connection between *ärgäy* and *ärki*. The sentence *munuŋ tüšämiš tüllärin koduru kololasar män otguratï ordog karšïg kodup tašgaru üngäy täg män* (MaitrH XIII 4v7) signifies 'If I deeply meditate on the dreams she dreamt, it looks as if I would definitely abandon the palace and go out', where I have translated the postposition as 'it looks as if'. The sequence *-gU täg* discussed above also fused in Middle Turkic to give just this meaning, as does Khakas *-gAdAg*. The history of *-gU täg* can be followed well through Middle Turkic, but by shape the Khakas form is actually closer to *-gA(y) täg* than to *-gU täg*.

The content of the forms in *-yOk* and *-gAlIr* (discussed in section 3.26) has *some* connection to epistemic modality, as they make the addressee look at events of the recent past and the imminent future respectively though their relevance for the moment of speaking, involving a special assertion that they are 'real'.

3.28. The non-finite verb

Non-finite verb forms are either infinitives referring to non-factive action (section 3.281), converbs (section 3.286), imperfect participles (section 3.282), perfect participles (section 3.283) or projection participles (section 3.284). All participles can also refer to an action, event, state or process whereas infinitives cannot, inversely, refer to any participants in the action as participles do. The *-gAlIr* form, being difficult to classify, gets a section for its own (3.285). Infinitives and participles can either be used attributively or be nominalised (irrespective of whether they refer to participants or to actions etc.); when nominalised they show the category of case and can be governed by postpositions. Converbs can only be used adverbially and normally show no nominal behaviour; they do, however, sometimes get case suffixes and get governed by postpositions suiting their adverbal meaning: The expansion following the /p/ in *-(X)pAn* as compared with *-(X)p* could be related to the instrumental suffix and *-mAtIn must* have been expanded from Orkhon Turkic *-mAtI* with the help of this suffix; the vowel converb appears to be governed by the postposition *birlä* in a construction denoting action immediately preceding the action of the main verb and *-gAlI* can be governed by the postposition *üčün*.

The border between participles and deverbal nominals (section 3.113 above) is a bit fuzzy, as different criteria are possible for the distinction, and these can lead to different classifications. One criterion for distinguishing the two is that the former are, like verbs, negated with *-mA-*. Another criterion is the degree of lexicalisation; but deverbal

nominals are often not lexicalised either, although their creation belongs to word formation. A third criterion is whether the word qualifies the subject, object, etc. as a permanent characterisation or something which the participant is involved in temporarily; the former is more nouny (and hence belongs more to word formation), the latter more verblike. This semantic-pragmatic distinction is not always easy to decide on even in context, and may not always have been meant to be clear-cut by the speaker/writer in the first place. The fourth criterion is government: In principle, verbs (including participles) govern direct and indirect objects while nouns don't. In fact we find that a large group of forms consisting of deverbal nominals with the agentive denominal suffix *+čI* – and a few others as well – do govern objects, though by far not as extensively as participles. Old Turkic participles govern objects exactly as finite verbs do.

3.281. The infinitive

The form in *-mAk*, which denotes actions, events, states or processes, is not all too common in Old Turkic, as the normal verbal complement for verbs is the *-gAlI* converb and as participles can also refer to events or actions. The infinitive is closest to the projection participles discussed in section 3.284; it differs from them in that it refers *only* to events or actions, whereas *-gU* or *-sXk* forms can also refer to direct or indirect objects, to time or place and the like. Considering the following instance (Hymnus 11) we note another difference between *-mAk* and the projection participles: *üztüntän enip ölmiš üzütüg ölmäkdä tirgürmiš täŋrim* signifies 'my lord, who revived from death (= from being dead) the soul which descended from above and died'; *öl-gü+dä* would have signified ' (saved) from dying' and would not have been compatible with *tirgür-*.

There do not appear to be any negative infinitives in early texts. We have them e.g. in *[subu]di ... ötünti ayïtdï [ät]özlüg savïg köŋüldä kïlmamakïg* (BT I F47) 'Subhūti ... begged to ask about the non-creation of bodily matters in the heart'[465] and *ïdmamakïŋïzlartïn ötgürü* (Suv 671,15) 'because you did not give up on it'; there are many more such forms in Suv.

We turn to the use of this form. In *yeg bolgay arïgda semäkdä yorïp otïn suvïn ätöz eltinmäk* (MaitrH XX 13r11) we find an impersonal infinitive phrase as the topic of a nominal sentence; it signifies 'It would be better if one lived in the forest, getting along with herbs and

[465] The BT I instance must be late also because a parallel, otherwise identical passage (D 117-118) has a different formulation with a positive infinitive.

water'. While behaving like a verb within the phrase of which it is the kernel, the infinitive also shows nominal categories like case, e.g. an accusative in an example quoted above. In the following instance it appears in the locative and governs an object: *nom nomlamakta uz ... boltülar* (Ht VIII 64) 'They became masters at preaching'. In *alku ... ayïg tütüš käriš karïšmakïg amïrtgurdačï ärür* (U II 58,5$_1$) 'They (are the ones who) pacify all quarrel and disagreement' the infinitive is parallel to deverbal nouns and serves as direct object of another verb. Infinitives can qualify nouns, e.g. in *ulïmak sïgtamak ünlär* (MaitrH XX 1r18) 'voices of moaning and weeping' or *ölürmäk sakïnčïn* (TT IV A 29) 'with the intention of killing'; in the second instance quoted here, however, it qualifies another verbal abstract and is in fact its object.

Nominal subjects which accompany this form appear in the genitive or in the nominative. *ol orontakï alku tïnlïglarnïŋ artokrak arïg süzük bolmakï bolur; tamuda tugdačï tïnlïglarnïŋ üzülmäki bolur* (U II 38,74-5) 'There takes place the perfect purification of all creatures who are in that place and a stop to creatures destined to be born in hell' is an example for the former; another one is *samtso ačarïnïŋ tavgač xan birlä käliš barïš bitig ïdïšmakïn ukïtmak* 'the description of the correspondence between Xuanzang and the Chinese emperor', the title of a chapter in Ht, where Xuanzang is the subject of *ïdïšmak*. In *burxanlarnïŋ tïnlïglarïg ädgü ögli köŋülin ömäki ögnüŋtä kaŋnïŋta takï artok üčün* (Warnke 195) 'because the Buddhas are well-meaningly considerate of the creatures even more than (their) mothers and fathers' the infinitive, with genitive subject and accusative object of its own, is the topic of a nominal clause which, in turn, is subordinated by *üčün*. With nominative subject we have *bökünki künkätägi mogočlar ootka tapïnmak tïltagï bo ärür* 'this is the reason for the Magi's worship of fire to this day' in Magier, U I 9. Other such instances are *biz bir ikinti birlä öčäšmäk kärgäk ärmäz* (Wettkampf 54) 'There is no need for us to fight with each other' or *činäk keginč bermäki nom* 'the book (about) chandaka's answering', the title of a text in WilkKatMan nr. 1. The first two quoted texts are Buddhist whereas the third is Christian and the fourth and fifth Manichæan. The case of the subject is crucial: The existence of nominative subjects shows that *-mAk* is inflexional and not derivational while the existence of genitive subjects does not speak against this status.

An infinitive is governed by instrumental *üzä* in *"käl toyïn!" temäk üzä toyïn kigürüp ...* (U III 75,2$_1$) '(Buddha) enlisted (them) as monks

by saying "Come,[466] monk!". The sequence *-mAk üčün* 'in order to', so common in Turkish, seems to be rare in Old Turkic. We find it in *täŋrikän uygur bokuk xan ... koyn yïlka üč maxistak olormak üčün možagka käŋädi* 'His Uygur majesty Bokuk xan (came to Xočo and) consulted with the Možak in view of the taking of office of three Mahistaks in the year of the sheep' in BuchFrag 1,1,2,7, a very early text. Note that the (nominative!) subjects of *olor-* here differ from the main subject.[467]

Reference to subjects can appear in the form of possessive suffixes added to the *-mAk* form, e.g. *sïnmakïmïznï buzulmakïmïznï tükätgäli umadïmïz* 'we couldn't stop our heartbreaking' (Ht VII 1916) or *maŋa amranmakïŋïz* (U III 29,1) 'your love for me'. With the third person e.g. *turkaru ögrünčün mäŋin ärmäki bolur* (TT VI 101) 'He enters a state of continuously living (or: dwelling there, i.e. in the house) in happiness'; DreiPrinz 121, an early Manichæan text, has *-mAk+lArI bol-. kältökümün kertgünzün[lär], siziŋ bägädmäkäŋiz(i)n ärklänmäkiŋiz(i)n bilzün[lär]* (DreiPrinz 65-67) has the infinitive in a construction identical with the perfect participle in *-dOk* and in parallel with it. *ol ok künkä ärtiŋü ögrünčüläšmäk kïltïlar* (DreiPrinz 109) 'On that very day they had a lot of mutual rejoicing' looks like a circumlocution for *'ögrünčüläštilär'*, perhaps copied from a source text.

Translating the instances we quoted, we used the English *-ing* form, abstracts such as the nouns *stop, answer, love* or *worship* or Latinate forms in *-tion, -ence* or *-ment*. The only case where we used the English infinitive was when mentioning the 'need to fight'. What corresponds to the English infinitive is rather the converb in *-gAlI* or, in other types of cases, the projection participle in *-gU*. *-mAk* is not a deverbal noun either, however, as it has full verbal government, can (on occasion) be negated with *-mA-,* can get nominative subjects and its forms are clearly not created for the lexicon. Unlike the English infinitive, it is not used adverbially. It is like the German infinitive or the Semitic *maṣdar* when

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[466] Or, if the first word is an Indo-Aryan noun, '(It is) time, monk!'.

[467] The reading *ämgäk ämgädi bizni kutadm[ak] üčün* in a passage in NesGlaub has no certainty, as the facs. shows that the lacuna could have contained much more than two letters. In itself such a phrase would not be surprising in a ms. dated by the editor to the 13th-14th century, which shows *kutar-* < *kutgar-* and metatheses such as *ŋl* > *lŋ* and *yr* > *ry*. The reading *ämgändi*, which Zieme here proposes (against his reading *ämgädi* in his quote from the ms. in NesTex), is possible in view of the fact that the base verb is otherwise not attested in Uygur although there is only one N / '; I do not think it is obligatory, however, as *ämgä- is* attested in Qarakhanid Turkic, and the text does have the aberrant feature of writing the ablative form in *+dAn* several times instead of standard *+dIn.*

getting accompanied by its subject in the genitive but unlike them when the subject is in the nominative.

The form *-mAk+lXg*, appearing rather extensively in adnominal function, is discussed in OTWF 154-155 and in section 4.61 below. *-mAksXz,* which is just as common, is dealt with in OTWF section 3.329. *-mAk* with possessive suffixes referring to the subject of the action and in the dative case is used in temporal clauses (section 4.633) or can give instrumental meaning.

3.282. Imperfect participles

Participles are verbal adjectives which, like other adjectives, readily assume nominal tasks, i.e. they can be heads of noun phrases. I here deal with participles under the headings 'imperfect', 'perfect' (section 3.283) and 'projection' (section 3.284); these are meant to be very wide labels, as the forms dealt with in section 3.283 do not necessarily have 'perfect' aspectual meaning, and the 'projection' in section 3.284 can mean many different things.

Imperfect participles turn out mostly to qualify nominals referring to *subjects*, or themselves to refer to subjects of actions expressed by the verbal base. They are only very rarely used for qualifying non-subjects; when they are, there is no explicit or implicit reference to the subject linked to them.[468] The perfect participles of section 3.283 regularly refer to *non-subject* participants, e.g. to direct or indirect objects, and to circumstantial entities; only rarely do they qualify subjects. Projection participles, dealt with in section 3.284, *never qualify the subjects* of their bases. All participles can also refer to actions, events, processes or states, in accordance with the fact that an Old Turkic adjective can, beside qualifying or denoting an entity bearing a particular quality, also be used for referring to the abstract quality as such. When serving as predicates, participles demand no copula, but the element *ol* may be used after them in such cases.

Imperfect participles are used as finite predicates to different degrees: *-Ur* is used much more often in such function than as participle and *-dAčI* is used in this way mainly in the runiform inscriptions.[469] On the other hand, we have come across only one instance of *-(X)glI* in

[468] The use to which the Suv puts forms in *-gUčI* is an exception: Those do get accompanied by explicit subjects.

[469] Another question, of course, is whether the present participle in *-dAčI* and the future suffix *-dAčI* should not (when disregarding diachrony) be considered to be mere homophones.

predicative use and *-(X)gmA* is never used in this way. *-gAn* and *-gUčI* forms are, in Old Turkic, even farther from finite use.

The suffix *-(X)gmA* forms positive imperfect participles: Negative forms are not attested; this may be a sign of reduced productivity: *-mAdAčI* and *–mAgUčI,* e.g., are common. Nor do *-(X)gmA* forms ever appear to be used predicatively; examples are heads or attributes. A number of Orkhon Turkic examples are quoted in Tekin 1968: 176; we also have *är-igmä* in QaraBalg d 5, a runiform inscription of the Uygur steppe empire. The form is rather common in Manichæan sources, e.g. *iki yarok ordo ičrä olorugma täŋrilär* (Xw 40-41 and 52-53) 'the gods residing in the two palaces of light'; *tört elig täŋrilärdä tanïgmalar, täŋri nomïn tutagmalar, tünärig yäklärkä tapunugmalar, tümänlik erinčü kïlïgmalar* (M II 11,5-8) 'those who deny the existence of the four ruling gods, disparage divine law, worship murky demons, commit sins by the ten thousands'. Cf. further *yerdä yorïgma yalaŋok* 'people living on earth'.

Substantivised we have, e.g., *bo ... agnayu yatagma* 'this (person) lying (there) writhing' (ManErz I 6); several further examples appear in the Xw. Substantivised *-(X)gmA* forms can, of course, also get case suffixes and *+lAr,* e.g. in *nomčï män tegmäkä artïzïp ...* 'getting (oneself) deceived by those who say "I am a preacher" (Xw 122); there are further such examples in IrqB XX or Ht I 135.

As pointed out in UW 429b (where examples of *är-igmä* are mentioned), the Uygur use of this participle is productive only in Manichæan texts;[470] Buddhist sources only have petrified forms from the verbs *är-* 'to be', *käl-* 'to come', *te-* 'to say' and *uč-* (because of *učugma* 'flying' qualifying 'creature' and referring to birds). The Maitr has the forms *käligmä* and *ärigmä*, the latter e.g. in *täŋri yerintä ärigmä täŋrilär* (Maitr 103v5) 'the gods staying in the divine country'. Another set phrase which stayed in use in later Uygur is *ken käligmä üd* 'the future' (e.g. BT II 141).

te-gmä is the only *-(X)gmA* form used for qualifying the verb's object; we have it e.g. in *darni te-gmä kapïg* 'the gate called *dhāraṇī*' (Suv 457,4 and BT II 1077), *činžu tegmä ärtöktäg kertü töz bälgüsi* 'the mark of the so-being true root called *tathatā*' (TT VI 190), *bo yertinčüdäki kamag eliglär kanlar tegmä üküši bodisatvlar tetir* (TT VI 248) 'most of those called kings and rulers in this world are considered to be *bodhisattvas*' and several more in that text. This use is very

[470] The word read as *y(a)rlïkagma* in M III nr.9 II,I r9 is now by P.Zieme (personal communication) seen to be *yalvarar m(ä)n*.

common in Buddhist texts (including early ones like TT VI) but seems to appear only in them. Possessive suffixes referring to subjects are never appended to *-(X)gmA* forms.

-Ur (negated as *-mAz*) is much more common in predicative verb forms (the aorist, discussed in section 3.233) than as a participle suffix. Examples for its use as participle are *uyakur yultuzlar* (Maitr) 'setting stars', *akïp* (or *agïp*) *kälir sogïk suv* (TT I 104) 'cold water flowing forth (or coming up)', *nom bilir är* (KP 14,3) 'a person who knows the doctrine', *bilig bilmäz kiši* (KT S 7) 'an ignorant person', *tayšanvu ögäsi bilgäsi tetir ärklig* (Mz 711 lines 32-33 quoted in Kings, 6th and 7th court) 'the mighty one called minister and cousellor of Taishanfu'. *körür közüm körmäz täg, bilir biligim bilmäz täg boltï* (KT N 10) 'My (normally) seeing eyes seemed as if they had lost their sight and my (otherwise) thinking mind seemed to have lost its senses' shows the form as a nominal governed by a postposition. *yazmas atïm* 'a marksman who does not miss' in DLT fols.470 and 610 is a negative adnominal instance; note that both DLT passages show it in proverbs.

In early texts the participial use of the aorist is not limited to agentive heads: The head of *yanmas yerdä oztumuz* (M III nr.16 v3) ‚We escaped the place of no return' is the *source* of the movement described by the verb, the place *from* which no creatures come back.[471] Nor is *bo tugar ölür yertinčü yersuv* (BT V p.35 v6-7; WilkKatMan nr. 170) 'this physical world *where* one gets born and dies' agentive; in this instance the head refers to the *place where* birth and death takes place continuously. Cf. *tugar ölür sansar* in ZiemeAra 88. In *yeltirär ay* (Windgott 17), literally 'the month (in) which (the wind) blows',[472] the

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[471] The form is irregular in that the suffix is in Old Turkic otherwise *-mAz* and not *-mAs*, and an early source would not confuse voiced and voiceless consonants. The ms. is now lost. *-mIš* would not fit the context very well (though [ï] is sometimes written with *alef*). Qarakhanid sources also have *-mAs* although they do not confuse the velars either; the text may therefore belong to a different dialect.

[472] "Windiger Monat" in UW 380. A literal German translation would be 'der Monat in dem es weht', 'wehen' (unlike 'to blow') being a verb which always has the wind as subject. Various Asiatic nature calendars have a month named 'windy month'. ZiemeWind translated this expression as 'antreibender Monat', taking the verb to be the causative of *yäl-* 'to trot, to amble'. There are three problems with his interpretation, adopted from EDPT 923b: Firstly, YYLTYR'R differs from *yäl-tür-ür* in all three vowels, the aorist vowel of *yeltir-* 'to blow' always being /ä/. Secondly, the earliest certain instances of *yältür-* are from the 15th century; it does not appear to have turned up in Uygur and the Tuñ word referred to in the EDPT entry can read also in a different way. Thirdly, the Tuñ and Ottoman instances referred to in the EDPT are about 'riding

head refers to the *time* frame. The verbs have neither explicit nor implicit subjects in any of these instances, so that no agentive possessive suffixes are necessary either on the head or on the participles. In MaitrH Y 243 which, unlike the previous instances, is Buddhist, the head (*ig*) is the *cause* of the (averted) event (*öl-*); it (and not the satellite) is marked with a possessive suffix referring to the person who might have died: *puranï atlag tirtilär baxšïsïn ... višučik atlïg ölür igintä ozguru yarlïkadï* 'He graciously saved Pūraṇa, the heretics teacher, from his deadly illness called *viṣūcikā*'.

The *-Ur* form is also governed by *ärkli* (runiform inscriptions) or *ärkän* (the rest of Old Turkic) to form the kernel of temporal clauses. The following sentence shows it in three different functions, governed by *ärkän*, qualifying a head referring to time, and governed by a postposition: *kaltï män öŋrä uzun asankülïg yolda bodisatvlar yorïkïnda yorïyur ärkän burxan kutïŋa katïglanur ugurda kaltï alp är čärigkä tägir täg isig özümin äsirkänčsizin titip ïdalap bo montag sukančïg nom ärdinig bošgundum tuttum* (Suv 395,4-10) 'While I *was* previously *walking* on the *bodhisattvas'* path along the world-age-long road and at a time when I *was striving* towards buddhahood I grudgelessly gave up my life as, for instance, a valiant man *goes* to the army, and learned and kept this treasure of a *sūtra* which is lovely to such an extent'.

The *-(X)glI* participle is mostly used in Manichæan sources and found also in two Yenisey inscriptions but is not too common in Buddhist Uygur. *yaltrïglï yašïn täŋri* (M I 25,33) 'the goddess of flashing lightning' is an instance with an intransitive verb; *üz]ütlärig udguruglï, köŋülüg ačïglï ymä köküzüg yarotuglï ... tirig öz berigli ... bilgä bilig* (M I 26,12-17) 'wisdom, which awakens the souls, opens the heart, brightens up the breast ... gives life' has transitive *-(X)glI* forms which govern objects. In M III nr.12 r3 we find a negated *-(X)glI* form: *üč yäg* (thus!) *savïn sïmaglï ... tärs azag nomlaglar* 'the ... propounders of heretic doctrines, who do not contradict the words of the three demons'.[473] Buddhist examples appear in Fedakâr 135 (Sogdian script) and e.g. in Vimala 1080 and 1081.[474] Kāšġarī fol.582-3 lists a number

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fast'; the *Tarama Sözlüğü* also confuses the semantically and syntactically distinct Ottoman verbs *yäldür-* and *yeldir-*. See section 4.612 for the frame sentence.

[473] This fragment in Manichæan script (WilkKatMan nr. 127) must be rather late, as it confuses voiced and unvoiced consonants (e.g. *yäg* for *yäk*, *b(ä)grü* for *bäkrü* 'firm', *toturu* for *tod-ur-u* 'to satiate') and has some other errors.

[474] Some further examples: *okïglï üntägli täŋri* 'the calling god', *buzuglï artatïglï* 'destroying' (ms. T I D 200 in the n. to TT V A 23); *üzüldäči [ol] mäŋü ol tegli bitiglär* (Ht VII 1952) 'writings saying "it is perishable" or "it is eternal"', *ačarika tušuglï*

of participles, then says that all are negated like *togra-ma-dačï* and *yüklä-mä-däči* and adds that, "in another dialect they say *togra-ma-glï* and *yüklä-mä-glï*". The *-(X)glI* form was still in use in Middle Turkic (Ata 2002: 88).[475]

Substantivized *-(X)glI* forms refer to the subject of the action, e.g., *kiši ät'özin buluglï antag ol ... üč yavlak yolka tüšügli anča ol* 'Those who attain human bodies are like ... (but) those who fall into the three evil ways are as ...' (TT VI 336-7); *bayïn barïmlïgïn ... kavišïglï az ärür, yok čïgay bolup ... barïglï ölügli üküš* 'those who come together again under eased circumstances are few; those who become poor, leave and die are numerous' (TT VI 314-5). The sentence *üküš tïnlïglar barïp ölügli* 'many creatures go there and die' in KP 26,7 is similar, but here the *-(X)glI* form is predicative.[476] In *tana muna yorïglïlar bar* (Maitr 165v23) 'there are people who live unaware of what they say and do' (and in another instance in Maitr 83v29) we find the form in the plural. *ikint[i] käliglika tayak berg[äy] män* 'To the one coming second I will give the staff' (DreiPrinz 28) and *ičiglikä yarašï säviglig bolur* (ZiemeWind 42) 'it becomes agreeable to whoever drinks it' are among the rare examples of the *-(X)glI* suffix with an oblique case form.

The phrases *ädgü ögli* 'well thinking, kind, compassionate', *ayïg ögli* 'evil meaning (person), enemy' and *köni tüz tuyuglï* 'he who senses rightly and evenly' are lexicalised and are used unusually often, e.g. in KP and Maitr. This is why we find *ädgü ö-glilärim* 'my friends' or, in Suv, *ayïg* or *ädgü ögli+kä*, *ögli+lär+kä*, *ögli+m* and *ögli+sin*; similarly with the third phrase. The UW (353-355) treats *ädgü ögli* as a lexicalised phrase, mentioning that F.W.K. Müller already pointed out that it was a loan translation from a Sogdian term lexicalised already in that language. *ögli* is the only *-(X)glI* form attested in the Hami ms. of Maitr; where the Sängim ms. has such forms they are, in the Hami ms., replaced by *-dAčI* or *-gUčI* forms.

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bursaŋ 'the congregation meeting the master' (Ht III 377), *bodisavtnïŋ kälgüsin küdügli ketumati känt uluštakï bodun bukun* (Maitr 146r5) 'the population of Ketumati, which was expecting the arrival of the *bodhisattva*'. *tüz tuyuglï* is a common attributive phrase for Buddha, e.g. in Maitr 197r4. In TT VI 153 *yokug biligli* 'a person knowing nothingness' is, in half of the ms., replaced by *yokug bilir*.

[475] In OTWF a form ending in *-(X)glXg* (< *-(X)g+lXg*) and functioning a bit like a participle is documented; though it may live on in Turkish *-(I)lI*, it does not seem to be the source of the Middle Turkic forms.

[476] In the n. to this passage, Hamilton states that this participle refers to actions reoccurring constantly. Such an interpretation is possible for many of the examples, but not, e.g., for the one in TT VI 314-5.

-(X)glI participles generally have intra-terminal meaning. The only possible exception I have met is *barma yïl änätkäkdin käligli arkïštïn darmaguptakï ... baxšïmïznï kïyïltï äšidip* 'last year (we) heard from the messenger coming from India that our ... teacher Dharmaguptaka had died' (Ht VII 1913), where the time reference is past and the messenger must have given the news after he arrived: *käl-igli* should therefore here have post-terminal meaning, unless there is reference to regular messenger service; the meaning should then not be 'the messenger who came from India' but 'the messenger who comes from India'; this would be possible even if it were not the same person every time.

The *-(X)glI* participle is obsolete in inscriptional Turkic, where we only have the clearly petrified *är-kli*[477] 'being': In *yuyka ärkli tupulgalï učuz ärmiš; yinčgä ärklig üzgäli učuz* (Tuñ 13) 'It is easy to pierce what is thin, they say, and easy to break what is fine'. The form *är-kli+g* just quoted shows that *ärkli* is also a participle and not a converb. Nor had it, at that stage, become a postposition as yet, since postpositions do not feature participant case morphology.[478] In other examples quoted in section 4.633, *ärkli* is added to *-Ur* participles from intransitive verbs to form an analytical temporal adjunct describing resultative states. What I here, following Tekin 1968, read as *ärkli* is spelled as $r^2k^2l^2I$, its accusative form as $r^2k^2l^2g^2$. Thomsen and Gabain had read it as *'ärikli'*. Schulz 1978: 192-205 attacked both readings and the connection with the participle suffix *-(X)glI;* he instead suggested reading the form as *'ärkäli'* (following Aalto, an editor of the Tuñ inscription) and deriving the suffix both of this and of *ärkän* from some mysterious element '*-kä*' or '*-gä*' which he was unable to explain. $r^2k^2l^2g^2$, again, was considered to be some remnant of unexplained archaic morphology. One of Schulz's motives for this proposal, that the participle clearly has a /g/ (as shown in the spelling with Manichæan letters in Xw 117; l.127 of the relevant ms.) while *ärkli* is spelled with k^2, is not so serious; cf. footn.477. The central argument for his attack is the fact that the *ärkli*

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[477] In runiform inscriptions /g/ may be spelled with k^1 / k^2 after /r l n/ to show that it is a stop in this position. For this contact between the two elements to take place, the onset vowel of the suffix must first have been elided, which it does not do e.g. in the form *berigli* quoted above, nor in *är-igli* in an Uygur example mentioned below. There is no phonotactic reason why it shouldn't, especially if the velar in *ärkli* is not only a stop but also voiceless (that it should, in other words, be assigned to the phoneme /k/), as /rk/ is a cluster well-attested in syllable-final position. See also pp. 78 and 121.

[478] Adjuncts, including postpositions, do get instrumental and equative case suffixes in *ašnu+ča, azu+ča*, *öŋi+n* and *birlä+n,* dealt with in section 3.3. These suffixes serve to make the adverbial status of these elements explicit, however, and do not assign participant tasks to them.

constructions are adjunct clauses whereas *-(X)glI* forms participles which never serve as adjuncts. I would not consider this to be a serious problem either (beside the fact that the Tuñ inscription twice uses *ärkli* as headless participle, once in the accusative case): Forms of the copula in many languages develop special uses, Turkish *ol-arak* 'as' being one example for such a special use. Translating *ärkli* with the German and English participle forms 'seiend' and 'being' will easily show that the participles of these languages can also be used in 'absolute' manner, i.e. as adjuncts. All this could equally hold for Uygur *ärkän*, prominent in Schulz's argumentation, which OTWF 383 had considered to be a remnant of the *-gAn* participle obsolete in most of Old Turkic though so active in the modern languages:[479] There, again, it would only be normal for an obsolete form to have survived in the copula, and with an aberrant function. The reading of the Tuñ instances of *ärkli* and their interpretation as participles is unproblematic on the one hand, and cannot, on the other hand, be separated from the other inscriptional instances spelled in this way. T. Tekin's understanding of the forms must therefore be correct.

In the following example the *-(X)glI* form has been taken to qualify a head which is not a subject, something for which I have found no parallel: *bögü xan käntü [dïndar]lar ärigli kuvraggaru kälti, d[e]ndarlar[ka] sökü̈düp ...* (TT II,1 34), translated "Bögü Qan kam seinerseits zu der Versammlung, wo die Elekten waren, und vor den Elekten auf die Knie fallend ...". *[dïndar]lar* may, however, be a wrong conjecture;[480] it seems likelier to me that we might have had the same construction as in Orkhon Turkic, with an *-Ur* participle before *ärigli* = *ärkli*, giving 'B. khan came towards the assembly himself being [adjective], knelt [before] the elect and ...'. Note, on the other hand, that this is a Manichæan text and that the use of the aorist to qualify circumstantial heads is also a Manichæan characteristic.

The participle suffix *-dAčI* is in runiform sources spelled with t^1 / t^2 in *öltäči* and *kältäči*, in both cases because of the /l/. In Manichæan sources T appears in *bošuntačï*, *kurtultačï*, *tapïntačï*, *sakïntačï, kïltačï*, *bertäči*, but also in *kömüštäči* in fragmentary context; on the other hand

[479] The etymology suggested for *ärkän* by Erdal 1991 was severely criticised by Johanson 1994 but adopted by Johanson 1996: 91, subsequently to be rejected again (oral communication). It *may*, instead, come from **ärür kän*, with a particle discussed in section 3.341, in case the temporal suffix *-mAzkAn* dealt with in section 4.633 is formed with this particle.

[480] The editors mark the *l* as well as uncertain.

we find *tägürdäči* in M I 26,17-18. This list excludes the late Pothi book and TT IX, which do not follow the early rule of spelling suffix-onset /d/ as T after /r l n/. I have come across one (adnominal) *-dAčI* form also in the (runiform) Yenisey inscriptions, in YE 28,9: *altun Soŋa yiš käyiki artgül tašgül; atdačï Upa Barsïm adrïlu bardï* 'Oh animals of the wooded mountain of Soŋa, multiply and flow over; my hunting Upa Bars has died'. This instance is clearly imperfective although it refers to the past. In the Orkhon inscriptions, *-dAčI* serves in positive finite verb phrases with future meaning (see section 3.26). That group of sources also shows this form in participial function with present or future reference, e.g. in *öltäči bodunug tirgürü igittim* (KT E 29, BQ E 23) 'I revived a dying nation (or 'a nation about to die') and took care of it'. Nominalised, *üküš öltäči anta tirildi* 'Many who were about to die were saved there' (BQ E 31). The instance in *eki üč bïŋ sümüz kältäčimiz bar mu nä* (Tuñ 14) can, in its context, refer either to the present or the future; it should mean 'We presumably have two to three thousand soldiers, including the ones who are coming / about to come'.

The KT and BQ instances just quoted show clearly that Orkhon Turkic *-dAčI* forms are not factive; their use differs from that of inscriptional *-sXk* participles (section 3.284) in that the former qualify or refer to subjects (in accordance with the normal behaviour of the other imperfective participles), the latter to all other participants in the action but not to subjects.

In Classical and Late Uygur as well as in Qarakhanid, the *-dAčI* suffix forms present participles, replacing the participle suffixes mentioned above, most of which are typical for pre-classical sources: *bo nom ärdinig bošguntačï tutdačï tört törlüg terin kuvrag* (Suv 423,16), e.g., is 'the four types of communities which believe in this jewel of a doctrine and adhere to it'. *tuttačï* is attested also in the QB. Further examples are *olordačï* (U I 15), *turkaru katïglandačï bodisatv* 'the *bodhisattva* who is continuously exerting himself' (U I 17,3). In Uygur, the negative counterpart of participial *-dAčI* is *-mAdAčI*, e.g. *[siz]ni ayamadačï agïrlamada[čï yok]* (Ht V 42) 'There is nobody who does not honour you'. Similarly, *sävmädäči idi yok* 'there is nobody who doesn't love' in Suv 579,12, *nomlarnïŋ asïlmakïn koramakïn körmädäči* 'he who does not see the increase and the decrease of the teachings' in 245,17. A *-mAdAčI* form in adnominal use: *tugmak ölmäk sansar ičintä tägzintürdäči, ämgäklig tägzinčdin tašgaru ïdmadačï igid äzüg adkangular* 'the deceitful and false bonds which make (the creatures) revolve in the *saṃsāra* of birth and death and do not let them out from the whirlpool of suffering' (Suv 305,1). Further examples are

bolmadačï in BT II 667 and 1030, *itürmädäči* 'he who does not lose' in BT II 718 or *üzmädäči käsmädäči* in BT VIIIB 253; timeless (i.e. presentive) *-mAdAčI* forms are very common in Uygur. While finite *-dAčI*, which refers to the future, often had *-mAčI* as negative counterpart, there is no evidence for *-mAčI* as present participle suffix.

ät'özüg talgokladačï tamu (BT II 551-2) is the hell where the devils employed there nail a person's body onto things. The head of this relativisation therefore represents the place of action; the expression *could* also be understood to say that this is the 'hell which nails bodies (onto objects)' if there is no other documentation for heads of *-dAčI* referring to place. *tamu* is, however, unlikely to be the subject.

UW 404 lists numerous examples of verb phrases in *-dAčI ärür / ärmäz*, *-dAčI ärti*, *-dAčI ärmiš*, *-dAčI ärsär*, *-dAčI ärip* and *-dAčI ärmädin* as if these were analytical constructions. The meanings of these sequences can, however, generally be distinguished from the corresponding simple forms: *Sew Keytä ulatï bäglär közgäšdäči, kördäči, užiklarïg ornatdačï ärdilär* (Ht VIII 1507), e.g., should not, presumably, be translated as "Xiao Jing ... und die übrigen Begs revidierten und prüften [den Text] und plazierten die Zeichen ..." but "The lords Xiao Jing etc. were *in charge of* collating and controlling (the text) and placing the letters': The formulation describes the division of labor and is not identical to the description of processes. Similarly *anïn öz ät'özlärin ölörgökä bolar siziŋ ütüŋüzni ärigiŋizni ärttäči ärürlär* (TT VIII N 10), which Hartmann and Maue in their reedition (Mātṛ 78) translate as "darum übertreten [die Toren] Eure Anweisung, dadurch, daß sie sich selbst töten". What is presumably meant is not a characterisation of acts, but a characterisation of a set of people committing these acts as sinners.

-gAn has wide-ranging and highly important functions in modern Turkic languages but was rather obsolescent in Old Turkic. It is dealt with in detail in OTWF section 3.324, as a number of *-gAn* forms got lexicalised; cf. also section 3.113 above: Some of the instances mentioned there may in fact belong here. OTWF 386-387 also refers to a number of *-gAn* forms, both in Old Uygur and in Qarakhanid, which are used as a part of the verbal system, as a habitual participle; we especially note the sequence *-gAn bol-*. Kāšġarī says that the form denotes duration, continuity, habituality and/or frequent occurrence of an action; this is also how he translates the numerous examples which he mentions. Kāšġarī's *-gAn* forms govern direct and indirect objects quite freely, although the fact that he lists the instances at all must have

meant that he thought the form belonged to the lexicon and not to inflexion; all of them refer to the subject of the verb. Some of the Uygur examples (such as were edited in TT VII and ETŞ, e.g. 12,6 or 30,9-10) are late but *kalïn kuvragag yet<i>gän uduzgan buyruklar* 'the commanders leading the dense crowd' (MaitrH XVI 9r28-29), e.g., is quite early and also shows the forms to have verbal government. In *atamnïŋ maŋa ülüštä täggän Taysaŋdakï ... borlukta* 'in the vineyard in T., which I got as my share from the inheritance of my father', which appears in a late legal document (SUK Sa11,3), the form is not habitual, i.e. it does not describe any quality of its subject, but is used as perfect participle. Another late economical document again has *-gAn* in perfect use, qualifying the verb's object: *inäčiniŋ saŋka kudgan üč [k]üri ü'rni ... altïm* 'I have received three bushels of millet which Inäči poured into the barn' (SUK Mi15,2).

-gAn apparently came to refer to the action in the aberrant dialect of the fragments in Sogdian script: We find *] ketäriŋ kim [...]*K *ölgändä kurtul[* (Fedakâr 415), where *+dA* is caused by verbal government: The meaning may have been 'do away with ..., so that (we, they etc.) may be saved from dying'. In this instance, *-gAn* is neither perfective nor future, in agreement with its other uses.

Negative adnominal participles from the forms mentioned appear to have been rare: With *-(X)gmA* and *-gAn* none appear to be attested. Adnominal *-mAz* is, of course, attested already in the KT inscription and *-mA-glI* in an early Manichæan source but 'normal' Uygur apparently did not make active use of these forms in the agentive domain. What became more and more normal was *-mAdAčI*; *-mAksXz* (dealt with in OTWF 3.329) appears to have been used extensively as habitual negative imperfective participle at the classical and post-classical stage. It had free verbal government; a majority of the instances appears to have been created for the passages in which they occur, i.e not to be lexicalised. *-mAksXz* was often formed from secondary stems, including the passive; this is why it did not *need* to qualify its object: When the head was an object, the attributive verb form was derived from the passive counterpart.

The formation with *-gUčI* consists of *+čI* added to *-gU* (section 3.284 below). It can be negated with *-mA-*: *köni kertü sözlämägüči kiši alku tamularnïŋ ülüši bolur* 'The fate of a person who does not say the truth is (to suffer in) all the hells' (DKPAMPb 279-80, alternating with *äzüglägüči* 'telling lies' in l.281); *adašïŋ ešiŋ m(ä)n tep tïlïn sözlä[p]*

sözlämiščä kïlmadïn utru sävinč u[tlï] bilmägüči bolsar ... (U IV D 64) '(Whoever) says 'I am your friend and companion' with his tongue but does not act in accordance with his words and is ungrateful, …';[481] *tsuy ayïg kïlïnč kïlïp ökünč köŋül öritmägüčilär* (MaitrH XXIII 9v2) 'those who have committed sins and have not repented'. The form can govern converbs, as in the example quoted last. Both *köni kertü sözlämägüči* and *sävinč utlï bilmägüči* are presumably meant to denote character traits. *-gUčI* forms govern objects, as in TT IV A 56-61: *toŋuzčï balïkčï käyikči äŋči tuzakčï boltumuz ärsär, torčï čïvgačï kuščï edärči, učugma, bagrïn yorïgma tïnl(ï)glarïg ölürgüči boltumuz ärsär, ït ätin satgučï boltumuz ärsär, ačakram yïlan ölürgüči boltumuz ärsär, luu üntürgüči yadčï boltumuz ärsär, [tïnlïg]larïg kïnagučï bukagučï boltumuz ärsär,* ...[482] 'If we have been hunters of wild boars, fishermen, wild game hunters, trappers, if we have been netters, bird-snarers, wild-fowlers or trackers who kill flying and crawling creatures, if we have been sellers of dog meat, if we have been killers of boa snakes, if we have been snake charmers or rain-stone magicians, if we have been jailers who torture people, …'. On the other hand we note in this passage that, from the actionality point of view, *-gUčI* is the verbal counterpart of *+čI*; both denote professions or people's characteristics: None of the eleven *-gUčI* forms quoted refers to an event, as verb forms are expected to do; all characterize people by their occupations, by social position, by recurrent behaviour or by psychological traits. By formal characteristics, however, this *is* a participle. The *-gUčI* forms in KT N 13 already show this behaviour; they govern direct objects and refer to professionals: *bark etgüči, bädiz yaratïgma bitig taš etgüči tabgač xagan čïkanï čaŋ säŋün kälti* 'There came an architect, (and there also came) the sculptor General Chang, the nephew of the Chinese emperor, who creates the ornaments'. Being a sculptor was clearly the imperial nephew's vocation, whereas *bädiz yaratïgma* refers to his actual work on Köl Tegin's grave (and 'general' is his title). In Uygur we have e.g. *ot yegüči tïnl(ï)g* (UigPañc) 'a herbivorous creature'. In nominal use: *k(ä)ntü bargay tamuka udu eltkäy bergüčig* (M III 29, nr. 12 r 7) 'He himself will go to hell and will take the donor after him'; in M III nr. 7 II r 5 the king's clothes are washed by an *uz yugučï* a 'master washer'. In Kuan 4a a *bodhisattva* gets the name *ün äšidgüči* 'the one hearing

[481] The phrase *sävinč utlï bil-* 'to be grateful' appears also in lines 38 and 57 of the same passage and *sävinčsiz* is 'ungrateful'.

[482] A very similar confession in U II 84-85 adds two further *-gUčI* forms, among them another one with direct object: *ämgätgüči boltum ärsär, kiši ölürgüči čantal boltum ärsär* 'if I became a torturer, if I became an executioner killing people'.

voices'. When Bögü Xan decides to adopt Manichæism for his people the Uygurs, he appoints some persons to the administrative position of *tavratgučï* (TT II,1 93): They get the task of urging the population to carry out pious deeds. Here is an equally agentive instance with direct object: *kayu nomčïlar bo altun öŋlüg y(a)rok yaltrïklïg kopda kötrülmiš nom ärdinig nomlagučï ärsär …* (Suv 474,1) 'Whichever preachers occupy themselves with preaching this golden, radiant all-surpassing jewel of a text …'. Persons involved in transactions are also referred to with *-gUčI* forms: *algučïka bergüčikä ayïtïp* (ActeOuig 35,18) signifies 'asking the buyer and the seller' and *čamlagučï kiši korlug bolzun* (SUK Sa 12,15, 16,15 and 28,22) 'The person lodging an objection shall bear the indemnities'.

Occasionally *-gUčI* forms qualify their object, thus no longer being agentive: *samtso ačarï kälürgüči burxanlar bitiglär* (Ht VII 1119) 'the Buddha figures and books which Xuantsang brought along'. The Manichæan instance *kunčuylar taysïlar bašlagučï [u]lug kičig kam(a)g bodun* (TT II,1 64) 'the whole nation, both big and small, led by princesses and princes' is especially early. The Suv has many such examples: *ol künki biziŋ ašda ölürgüči ud koyn toŋuz bašlap tünlïglar* (Suv 6,13) 'creatures, mainly bovines, sheep and pork, which we slaughtered on that day at our meal'. *tükäl bilgä t(ä)ŋri t(ä)ŋrisi burxan y(a)rlïkagučï bo bodi tegmä yorïk* (Suv 379,9) 'this path called *bodhi* which Buddha, the perfectly wise god of gods, teaches / taught'; *birök eliglär xanlar k(a)ltï t(ä)ŋrim siz y(a)rlïkagučï bo töröčä ävrilip ... bo nom ärdinig äšidsärlär* (Suv 423,13; similarly 436,21) 'if kings and rulers should, however, live according to the teaching which you, my lord, propound (= *yarlïkagučï*), and … listen to this jewel of a doctrine'. Another *-gUčI* form qualifying the verb's object appears in a Mz (i.e. earlier) ms. version of Suv 189,13 but is replaced by the *-dAčI* form in the much later Petersburg ms. These instances do not refer to persons by their occupations or characteristic behaviour, as agentive *-gUčI* forms do.

3.283. Perfect participles

Perfect participles qualify or refer to their direct or indirect objects, to other participants in the event or to entities describing circumstances; even more often, they refer to actions or to states. They can also, like the imperfect participles, qualify nominals referring to subjects or themselves refer to subjects of actions. They appear to be always factive. Cf. the beginning of section 3.282 for more details.

The perfect participle suffixes are *-mIš*, *-dOk* and *-yOk*; positive *-dOk* is used mainly in runiform and Manichæan sources while *-yOk* is never used in those sources. Suffixes of these shapes appear also as finite verb forms, but the uses and meanings of the finite forms and of the perfect participles are different and not to be confused. *-dOk* does not in Old Turkic appear in finite use (as we shall show below) in its positive form but only as negative *-madOk*; this latter is the negative counterpart of both finite and infinite *-mIš* in earlier Old Turkic texts: *-mAmIš* comes up only in late Uygur. While finite *-mIš* (and with it finite *-mAdOk*) express evidentiality and mirativity, the perfect participles in *-dOk* / *-mAdOk* and *-mIš* (as well as the late *-mAmIš*) never have this content. Finite *-yOk* is vividly post-terminal, implying the speaker's direct observation of an event (whereas the use of finite *-mIš* involves autopsy only if the speaker is using it as a mirative, then referring not to an event but to a state). The meaning of infinite *-yOk* does not seem to differ much from infinite *-mIš*, on the other hand, and that of infinite *-mAyOk* not much from infinite *-mAdOk*.

In the perfect domain, the earliest Old Turkic (including Orkhon Turkic, the Uygur kaganate inscriptions and most Manichæan texts) differs from the rest of the corpus: In the Orkhon inscriptions, *-mIš* (or *-mis*, as it is spelled there) mainly qualifies or refers to subjects, while *-dOk* appears in the inscriptions and in most Manichæan sources when the head refers to participators other than the subject (e.g. the direct or indirect object) or to circumstances (e.g. the time of the event). *-mA-dOk* is well documented in all manner of Uygur texts as readily qualifying subjects as well as non-subjects; e.g. in *arïmadok tsuy irinčülärim* (TT IV B50) 'my unpurified sins' where the head is subject and *täŋri unamadok avïnču* 'a pleasure woman not approved of by heaven' from the IrqB[483] or *körmädök ešidmädök savlarïg kördüm tep tedimiz* (MaitrH XX 14r5) 'We said (about some) matters that we had seen (them although we) had neither seen (them) nor heard about (them)', where the head is direct object.

In Orkhon Turkic, *-dOk* is spelled with t^1 or t^2 after stems ending in /l n r/ such as *kazgan-, olor-, yaŋïl-, yazïn-, ber-* but never after ones ending in other consonants or vowels; this apparently shows that /d/ was realised as a stop after the sonants. This distribution appears to have been retained in Manichæan texts, which write *-tOk* with stems

[483] T.Tekin 1997: 6 takes *täŋri unamadok* to be a sentence by itself, which he translates as 'Heaven was apparently not pleased with it'. This is not acceptable because the 'it' which he introduces into his translation would have to refer *forwards* to *avïnču*; however, Old Turkic zero reference points backwards, not forwards.

such as *bol-, ämgän-, ärksin-, kargan-, tägin-, ör-, ür-, är-, kurtgar-, azgur-, kör-* and *turgur-*. When a *-dOk* form is used not for qualifying a nominal but itself serves for reference and when it refers to an entity other than the subject, reference to this latter *can* appear in a possessive suffix added to it. This is by no means obligatory as it is in Turkish, however, and the *-dOk* form does appear without possessive suffix when the hearer or reader is expected to know the identity of the subject in some other way.

In section 4.622 we quote some examples of (positive) *-dOk* forms used as direct objects; most of them appear in Manichæan texts, but there is, e.g., an instance of *är-dök+in* 'its being (acc.)' in a rather late letter. This may not be an archaic trait in that case; rather, *är-dök* from *är-* 'to be' appears – as in Turkmen – to have developed a life of its own, independent of that of the suffix itself. If the literal source of *ärdök täg*, corresponding to the common Buddhist term Skt. *tathatā* 'thus-ness', is 'like what is', this would mean that *ärdök* here refers to the subject of *är-*. In a Buddhist text we have a headless *-dOk* form referring to the object of the subordinated verb and serving as subject of the whole sentence: *ogrï tep tedökünüz nägü ol* (KP 59,5) 'What is that which you have called a thief?'. A further such instance is quoted in section 4.621. In *kältöküm bo tep ötünti* 'He said "These are (the circumstances of) my coming', on the other hand, the *-dOk* form, which serves as topic in a nominal sentence, appears to refer to circumstances (the same Buddhist text just quoted, KP 60). We also have *-dOk* forms in oblique cases: An inscriptional example (with 1st person possessive and the instrumental case) is *biltökümün ödökümün bunča bitig bitidim* (KČ S 2) 'I wrote all this text based on what I know and remember'. *aydokïnča kertü bolur ärti* 'it used to come true according to what he said' (M III nr.13 I v3) and *yarlïkadokumča* 'according to what I ordered' (ms. U 311 b v4, Wilkens 103) are both from Manichæan sources. Then we have *-dOk* forms governed by postpositions and relational nouns: *tutdokumuzda bärü* 'since we kept' (Xw 148) is, again, Manichæan. *Burgučan Alp tarxan bäg eläntök ärksintök ugurïnta* (M I 27,10) 'on the occasion of the coming to power of the lord B.A. *tarxan*' could in principle be analysed in two ways: Either, as happens in many modern Turkic languages, the possessive suffix in *ugur+ïn+ta* refers to the subject of the adnominal participle, which does not itself inflect for subject but transfers that onto *ugur* 'occasion', the head of the construction. Alternately (and I think correctly), *ug(u)rïnta* is taken to be part of the relational noun construction (see section 4.22); the

-dOk forms themselves are then understood to refer to the action and not to the event's circumstance.

In *it ürdöki kuš üni ... äštilmäz* 'No barking of dogs and no sound of birds is heard ...' (M III nr.32 r1) or *bo kargantokïn, alkantokïn, käŋräštökin yöntüštökin bilmäz kiši täk sögüščä oyunča sakanur* 'An ignorant person takes this cursing and quarreling of theirs to be just scolding and play' (M I 9,16-18), the *-dOk* forms refer to the action; as the contexts show, the 3rd person singular possessive suffixes refer to plural subjects. In a Maitr instance quoted on p. 484 below, we find the instance *sakïntoklarï üčün,* where subject plurality *is* taken into account. The possessive suffix can also be wholly absent with *-dOk* forms used as perfect participles, if the context makes this reference superfluous, even if the verb is not impersonal; e.g. *yarok kälip tünärigig yaydok üčün* (M III nr.1,IV v3) 'because light came and dispersed darkness': The *-dOk* form is often governed by *üčün* with the meaning 'because'. In the *-dOkIn üčün* phrase (discussed in section 4.635), intransitive verbs appear as freely as transitive ones. The locative of the *-dOk* form rather commonly serves as a common temporal converb (see section 4.633); it can also be governed by temporal postpositions such as *bärü* 'since' or *kesrä* and *ken* 'after'. In Manichaean sources, the instrumental form (added to *-dOk* with possessive suffix) supplies 'reasons' for the main clause, e.g. *azgurdokïn* 'because he led (our senses) astray' (Xw 19) or *kop yerdä ačïg ämgäk körtökin* 'because they suffered bitter torments everywhere'.

Tekin 1997 quotes instances of *-dOk* and *-mAdOk* found in the runiform inscriptions and further deals with the etymology of this suffix and with its real or assumed finite uses.

-mIš forms are generally subject participles in Orkhon Turkic, whereas *-dOk* forms serve as perfect-domain non-subject participles of that dialect (as of Turkish). *-mIš*, which also serves the expression of indirective status (section 3.27), is often spelled with s^2 (not š or s^1)[484] in Orkhon Turkic: More in some texts than in others; the BQ inscription often changes *-mIs* forms of its source, the KT inscription, to *-mIš* without changing much else in the passages, and inscriptions of the Uygur Steppe Empire write *-mIš* even more often. These fluctuations do not specifically concern this particular suffix but are related to the spelling and pronunciation of Orkhon Turkic /š/ in general;

[484] Yenisey inscriptions have both $š^1$ and $š^2$, but Orkhon Turkic uses the character serving as $š^2$ in the Yenisey inscriptions both in front and back contexts.

nevertheless, one gets the impression that /š/ surfaces as *s* a bit more often in this suffix than elsewhere.

In Uygur as distinct from Orkhon Turkic, *-mIš* forms refer to non-subjects more often than to subjects. Examples for adnominal inscriptional *-mIš* participles are *elsirämiš kagansïramïš bodun* (KT E13) 'the people who lost state and ruler'[485] and *igidmiš kagan* (BQ N6) 'the ruler who has nourished (you)'. In *anta kalmïšï* 'those among them who stayed there' (KT S9; similar expression in Tuñ 4) the verb form itself refers to the subject. *tägmiš* in *türk bodun k[ïlïngal]ï, türk kagan olorgalï Šantuŋ balïkka taloy ögüzkä tägmiš yok ärmiš* (Tuñ 18; there is a similar passage in Tuñ 47) can be understood in participial use, giving the meaning 'Since the Türk people came into existence and since a Türk ruler gained power there it is said that nobody had reached the town(s) of Shantung or the sea'. Another possibility (cf. T.Tekin 1968: 179) is that it is to be understood as action noun: '... it is said that it (i.e. the Türk people; or 'he', i.e. the Türk kagan) had never reached ...'. The latter possibility is supported by the same construction appearing in Fedakâr 239: *ol üdün uluš üzä burxan tiši [en]miš*[486] *yok ärti; bolar yalŋoklar tümän türlüg ämgäk ämgänip ...* 'At that time the buddha Tişya had not yet descended upon the people; these persons were suffering a myriad sorts of suffering and ...'. There is one clear Orkhon Turkic example for *-mIš* in non-subject use: *kaŋïmïz äčimiz kazganmïš bodun* (KT E26; BQ E22). Tekin takes this passage to signify "the people who were conquered by our father and uncle"; however, the Türk people, who are here being referred to, were hardly conquered by Köl Tegin's father and uncle but rather were conquerors together with them. It might just be possible, therefore, that the *-mIš* forms here also qualify their subject, the nominatives *kaŋïmïz äčimiz* standing for comitative content. Had it not been for this example, the Orkhon Turkic use of the *-mIš* participle would have been identical to the Ottoman and Turkish one, whereas the Uygur use of *-mIš* reminds one of the use of *-gAn* in many Non-Oguz languages. The inscriptions of the Uygur Steppe Empire keep the use of *-mIš* forms within the sphere of subject participles. We have, first, the proper name *Ozmïš* ('one who has prevailed') *Tegin* in ŠU N9 and Taryat E6 and 9 and the regal name

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[485] See section 3.211 for the *+sIrA-* formation.

[486] The string MYŠ appears at the beginning of a line and the end of the previous one is torn away with about three letters missing; the editor's *t(a)yšïnmïš* makes no sense. *Tişya*, the name of a previous *buddha*, has already appeared several times in Uygur texts as *tiši*.

Täŋridä Bolmïš ('born in heaven') *El Etmiš* ('who has organised the people') *Bilgä* (or *Uygur*) *kagan* in ŠU N1, Taryat S6 and W1 and 6 and Tes 12. *anta kalmïšï bodun* (ŠU N3) reminds one of *anta kalmïšï* quoted above from the Orkhon inscriptions and appears to signify 'that part of the nation which remained there'.

In Classical Uygur, *-dOk* is not used as positive non-subject perfect participle; the whole perfect domain is covered by *-mIš*. *-mIš* and *-dOk* enter into complementary distribution in that *-mAdOk* serves as negative counterpart of *-mIš*; *-mAmIš* appears rarely, and only in very late Uygur sources. This is the situation e.g. in the voluminous Suv, where there are 11 *-dOk* forms all referring to the action and not to any participator,[487] 26 instances of *-mAdOk* but, on the other hand, only 3 instances of *-mAmIš* (all three in 57,13-15, where they are contrasted with *-mIš* forms of the same verbs). Cf. *kälmädök üdtä tugar tugmaksïzïn* 'He will in the future (*käl-mä-dök üd*) be born without birth' (BT I D161); *kut bulmadok toyïnlar* (Maitr XXIV Endblatt 13) 'monks who have not attained salvation'.

-mIš forms not representing their subject often have possessive suffixes referring to the subject, as *zaxariya dendarnïŋ ölüm täginmiši* (U I 9,9) 'how the priest Zakharias met his death'; *kälmišimizdä* (Ht VII 2046) 'when we came' (literally 'at our completed coming'), *kämišmišiŋizkä* (Ht VII 2147) 'because you have thrown it away'. They do not, however, always get the genitive of personal pronouns: *anïn män anta ažun tutmïšïm kärgäk* 'therefore I should get born there'. In section 3.24 we mentioned an emphatic construction of the shape *-mIš+Im bar* which clearly involves *-mIš* forms used as action nouns.

Reference to subjects of such action nouns by possessive suffixes is not obligatory; thus in *bo ülüštä Samtso ačarï ... čoonanka barmïšďïn bašlanur, ... ät'öz kodmïš üzä üzülür* 'this section starts with Xuanzang having gone ... to Č. and ends with his death', where the *-mIš* forms refer to the action. The introduction to another Ht section (Ht VII 9) has the same form. *bo nom bititmiš buyan ädgü kïlïnč* 'this meritorious deed consisting of having had the *sūtra* written down' shows an adnominal action noun in *-mIš*. In *tegin alkunï taplamaďï, täk taloy ögüzkä kirmišig tapladï* (KP 15,3) 'The prince didn't like any (of the other ideas presented to him), he only liked going out[488] to the sea', the verb

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[487] Another four instances of *-dOk* which appear in the colophons or in the *Buyan Ävirmäk* section which is a later addition represent the finite *-dI* past in the 1st pers. pl., and show that these sections belong to Middle Turkic. The *Buyan Ävirmäk* has been excluded from the material serving as base for this grammar.

[488] *kir-* for this meaning is a calque on a Chinese expression, as shown by Hamilton in

is not impersonal either, though the subject of the *-mIš* form is again not expressed: The reader understands it to be the same as the subject of the main verb. In the sentence *ol bermiš bušïda, kïlmïš ädgü [kï]lïnčda ötrö yarok [täŋri] yerin utlïsïn bultum* (M III nr.13, 31,3$_2$) 'Because of those alms which (I) gave and the good deeds which (I) performed I found the bright [heavens] as retribution', reference to the subject is inherited from the main verb. In the following example (from Suv 5,8) the perfect participle used as action noun is also adnominal but it has a subject, referred to by a possessive suffix on the head: *korkmaŋlar, m(ä)n amtï sizlärkä tirilmiš tïltagïmïn sözläyin* 'Don't be afraid, let me now tell you all why I got resurrected'. *ögmiškä ymä sävinmädin, yermiškä ymä yerinmädin ikigükä barča bir täg ädgülüg bolurlar burxanlar* (U III 73,21), finally, signifies 'without being glad when somebody praises them nor sorry when somebody criticizes them they, the Buddhas, have an equally positive attitude towards both'. F.W.K. Müller's translation as "Weder über das Lob freuen sie sich, noch vom Tadel fühlen sie sich betroffen" is acceptable because the context lets the reader understand *Lob* and *Tadel* as action nouns and complete the subject of *ög-* and *yer-* as 'somebody'. It is misleading, however, when Gabain 1974: 73 defines *-mïš*, *-miš* as "zeitlich indifferentes Verbalnomen, aktiven oder passiven Charakters" only because *-mIš* clauses can qualify both subject and object heads, and wrong when she renders *ögmiš* as 'Lob' in §122 in the same way as she renders *yaγmur* as 'Regen' in §123 and *tügün* as 'Knoten' in §124, as if it were a derived lexeme.

-mIš forms are also used as attributive and predicative participles, as the two instances in the following sentence: in *ol yarok yašuk važïr öŋlüg alkatmïš yer ... beš bölükün bölmiš ol* (BT V 188-191) 'That bright and shining praised land with diamond appearance is divided into five parts'. Note that *yer* is the object of *böl-* but the subject of reversive **alkat-* 'get (oneself) praised'. A number of *-mIš* forms from causative *-(X)t-* stems (in later sources replaced by *-tXl-* stems) are lexicalised: No bases are attested for *alkatmïš, amratmïš, bayutmïš, bulgatmïš, eritmiš, kargatmïš* and so forth. *olar bo darni sözlämišig umagaylar ämgätgäli* (DhāSū 12) 'They will be unable to torment somebody who has recited this *dhāraṇī*'. In two attributive examples quoted in the previous paragraph from M III nr.13 the *-mIš* forms qualify their objects. Predicative participial (and perfect) *-mIš* presumably *has* to be followed by copular *ärür* or *ol*, as it would otherwise be confused with

his note to the passage.

evidential *-mIš*, which is always predicative; the former is dealt with in section 3.26, the latter in section 3.27.

The *-yOk* form was in use only in Uygur; its suffix is attested with a rounded low vowel in Brāhmī script, in TT VIII H5 (*ünmäyökiŋä*) and L18 and 21-22 (both *tükämäyök*). The low vowel is not certain: All the Brāhmī examples we have use the suffix after /ä/, and this may have been a lowering factor.[489] It has a finite use as vivid past, a past with relevance for the speaker's present, as discussed in section 3.26. In infinite use, however, it merely expresses post-terminal content, mirroring the split found in the use of *-mIš* between finite and infinite use; e.g. *bulganyok köŋüllüg tïnlïglar* 'creatures with confused hearts' (Pothi 227-8); *tükäl yazoklug, sïnyok čaxšaputlug dentar* 'an utterly sinful priest who had broken the precepts' (fr. TI D 200 in the n. to TT V A 23); *ädgü tetyök nom* 'the teaching considered to be good' (Pothi 108). Negated e.g. *övkä köŋül öritmäyök tïnlïg* 'a creature which never let itself get into an angry frame of mind' (U III 42,12). In all the instances quoted hitherto, the head was the subject of the *-yOk* form. Negated and qualifying the verb's object, as the negative counterpart of *-mIš*, as it were, we have, e.g.: *kïlmayok ayïg kïlïnčlarïg ikiläyü takï kïlmaz män* (Suv 138,3) 'The sins which (I) have not committed till now I will not commit in the future either'; *körtüm körmäyök yerig, äšiddim äšidmäyök nomug* (Ht V 13a3-4) 'I have seen places hitherto unseen, have heard teachings hitherto unheard'. Nominalised, representing the object: *kemi sïyokïn tuta üntüm* (KP 54,6) 'I got out holding on to a piece of ship debris' (*sï-* 'to break – tr.').[490]

-yOk forms are also used as abstracts; possibly, only negative verbs here occur with this function: The instances *sundari kïzniŋ četavan säŋrämtin kälmäyökin bilip* ... (BT III 210) 'learning that the girl S. had not yet arrived from the J. monastery, …' and *özümnüŋ bašgarïp umayokum ärür* (r63 of a colophon published in AbiShōtan p.76) 'this is a case of my being unable to suceed' both have possessive suffixes referring to the subjects and subjects in the genitive. *sav söz ötmäyökkä* (Ht VII 2065-66) 'because the news had not yet gotten through' has no such suffix and the subject is in the nominative; a further instance without possessive suffix appears in Ht V 192. Similarly, *bir küp bor tägmäyök üčün* (SUK Sa9,6) signifies 'because a container of wine has

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[489] The suffix is in use in South Siberian Turkic, mostly in the shape *-čXk*, and was borrowed into Kamas, a Samoyed language spoken in South Siberia, as *-yUk*.

[490] Concerning this last instance one might consider the possibility that it is a copyist's misreading of *sï-n-ok*; cf. also the passage discussed in OTWF footn. 271.

not arrived'. The following *-yOk* form is governed by a relational noun, again giving the same meaning: *tävlig kürlüg sakïnčïn köni sözlämäyök tïltagïnta alku tïnlïglar yerip yarsïp uzatï kargayurlar* (DKPAMPb 273) 'Because, due to his deceitful thoughts, he has not been saying the truth, all creatures despise him and curse him incessantly'. *-mAyOkkA* is the negative counterpart of causal *-mIškA*, *-mAyOk täg* of *-mIš täg* and so forth.

3.284. Projection participles

The participles with the suffixes *-sXk* (used in the runiform sources and in the Manichæan Uygur X^{w}āstvānīft), *-gU* and *-gUlXk* (used in all other sources) are here called 'projection participles' because they are used for presenting projections of expectations, evaluations and intentions. See the beginning of section 3.282 for general considerations.

The shape of the *-sXk* suffix needs some clarification. That it has fourfold harmony in the runiform inscriptions follows from the fact that *kün tugsuk* 'east' is spelt with ^{w}q in runiform script (Qara Balgasun B7) whereas *batsïk* 'west' is spelt with runiform ^{ï}q in KT S2 = BQ N2 and as b^{1}t^{1}s^{1}Ik^{1} in Qara Balgasun B9. Other forms with rounded-vowel bases are *to(s)suk* in KT S8 and BQ N6, *olorsukum* in Tuñ 12 and 22, *ölsüküŋün* and *tutsukuŋun* in KT S10 and BQ N8, *tugsuk* in KT E4 and 8 and S2, BQ E5 and 8 and Ongin 2. In none of these is the vowel of the suffix written out explicitly. On the other hand, the suffix is spelled with s^{2} in the Tuñ 22 and Ongin 2 examples, although their bases are *olor-* and *tug-* respectively, as is the suffix of *udïsïkïm* in Tuñ 12 and 22. Since s^{2} often appears beside /ï/ as well as beside front vowels, the idea that the suffix was *-sIk* in the Orkhon texts (as proposed by T.Tekin) cannot be wholly ruled out. Rounding is in this suffix actually documented first in the Qara Balgasun inscription from the late Uygur steppe empire (quoted above), but implicit vowels can nevertheless be expected to be either /A/ or /X/: *-sXk* therefore remains the form we take the suffix to have had. The *k* ~ *g* variation is found also within the Xw, whose ms. in Manichæan script uses quite distinct characters for the two phonemes. Referring to the lines of that ms. we find *ančola-sïk* (222 and 248), *olor-suk* (246 and 273) on the one hand, *alkan-sïg* (210), *kigür-süg* (229), *sözlämä-sig* (295) and *išlämä-sig* (297) on the other. The likely explanation for this variation is that the form was no longer alive in the language of the person copying it from a source in Uygur writing and that he therefore did not know how it was pronounced; this is, after all, the only extant Uygur text with this form. Otherwise the

ms. confuses velars only very rarely (once 'GSWG for *ägsük*, which appears correctly elsewehere in the text, and twice S'GYZ for *säkiz*).[491]

In one Orkhon Turkic passage repeated in different texts a *-sXk* form appears to be used several times in finite use for expressing predictions, with reference to the subject in a possessive suffix appended to the form itself; see section 3.26 for that.

Infinite *-sXk* either refers to the action or to non-subjects, or qualifies non-subject heads. Examples for the first are *tün udïsïkïm kälmädi, küntüz olorsukum kälmädi* 'I did not feel like sleeping at night nor like resting at daytime' (Tuñ 12), *yaŋülïp ölsüküŋün ... bunta urtum* 'I set down here (how) you will needs err and die' (KT S10), *ančolasïk k(ä)rgäk ärti* 'it was necessary to give presents' (Xw 176-177) or *wusanti olorsuk törö* 'the rule of sitting in fasting' (Xw 175). *el tutsuk yer* 'the place to rule the realm (from)' (KT S4) or *sözlämäsig ... söz* 'words which one should not utter' (Xw 198) are examples for forms of this formation qualifying non-agent participants. The only *-sXk* forms in use in other Manichæan texts are the petrified *kün tugsuk* 'east' (e.g. in M III 9,1) and *kün batsïk* 'west' e.g. in M III 9,3); these two terms appear also in a runiform inscription and were known to Kāšġarī as well.

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[491] The sentence *esig küčüg bersägim* ($b^2r^2s^2g^2m$) *bar ärmiš* was read in Ongin 10 in Clauson's 1957 reedition, and there translated as "I had a wish to give my services". Tekin 1968 proposed reading *ber-sig-im*, assigning the form to the suffix discussed here. He is right in stating that *-sA-(X)g*, which Clauson was presumably thinking of, is highly unlikely here: There is a denominal desiderative suffix *+sA-* and a deverbal desiderative suffix *-(X)g+sA-*; *-(X)gsA-* became *-(X)sA-* only in Qarakhanid. The reading is hardly correct: All reference to this inscription (including Clauson's) is based on Radloff's work, which is known to have often been untrustworthy in the Old Turkic domain; there is no free alternation between voiced and voiceless consonants in any Orkhon Turkic text.

Benzing 1980 suggested that the suffix was originally *-sXk* but that the phrase *kün tugsuk* 'east' etc. was in fact petrified and lexicalised and that the productive forms were to be read as *-(A)sXk*. This was meant to explain why Tuñ 22 and Ongin 2 have s^2 in the suffix when added to the stems *olor-* and *tug-*; Schulz 1978: 139 followed his teacher in reading the Tuñ 12 and 22 instances as *'olurasïqïm'* and *'olurasiqim'* respectively. According to Benzing, *-(A)sXk* then changed to *-(A)sXg* as first documented in the Ongin inscription in the form just quoted, and was the source of the Turkish, Tatar etc. future participle in *-AsI* with possessive suffix, already attested in the DLT. The problem with this idea is that the additionally hypothesized vowel is nowhere attested in Old Turkic and that it contradicts the facts: *tug-suk* in Qara Balgasun B7 would not have been written with ^{w}q if it had been *'tug-asïk'*; nor can *kigür-süg* in Xw 167 be read as *'kigür-äsig'*.

In non-inscriptional Old Turkic (except the Xw), the non-factive task of *-sXk* is filled by forms in *-gU* or *-gU+lXk.* There is a single, abstract *-gU* form already in the KT and BQ inscriptions (E23 and E19 respectively): *kürägüŋin üčün ... xaganïŋïn ... eliŋä ... yavlak kigürtüg* 'Because of your obstinacy / unruliness (*kürä-gü+ŋ+in* with agentive 2nd person suffix referring to the Turk nation, and accusative ending as demanded by the postposition by which the word is governed)[492] you introduced evil into the realm of your emperor'. As bases of *-gUčI,* derivates such as *ölürgüči* 'killer' or *kolgučï* 'beggar', *-gU* forms did not have projectional meaning either. *-gUlXk*, another composite suffix based on *-gU*, is necessitative; *+lXk* appears to have been added to *-gU* to make this meaning explicit. *-gU* is negated with *-mA-* (as is *-gUlXk*); e.g. in *uzatmagu* (BT V 908), *kïlmagu kïlïnč* 'a act not to be carried out' or *tünlä küntüz sakïnmagu sakïnïp ...* (l.13 in LeCoqChuast pp.27-8 = WilkKatMan nr. 421) 'by night and by day thinking things which are not to be thought'. This is a clear indicator of its belonging to inflexion and not word formation. The fact that some *-gU* forms got lexicalised is no counter-argument, as lexicalisation took place with inflected forms as well. Nor is the fact that *-gU+sXz* is also attested[493] a counter-argument: Similar to it we have the equally nominally negated *-gUlXk+sXz* (OTWF section 3.312) and *-mAk+sXz* (OTWF section 3.328) beside the verbally negated *-mA-gUlXk* and *-mA-mAk* (a rather late and rare form). The difference between the two ways of negation is clearest with *-mAk*, in that *-mAksXz* is a full-fledged nominal whereas *-mAmAk* stays an infinitive.

The 'projection' quality of *-gU* will be clear from the meaning of, e.g., *adïn bergüm yok üčün* (SUK Sa2,2) as 'because I have nothing else to give'. In the following Uygur instances the form with *-gU* refers to a necessity or an intention: *sözläšgüŋ ärsär ünüp kälgil* (UigBrief D) 'If you have anything to discuss, come on here'. In *tïnlïglarïg kutgarguda* 'when one intends to save living creatures', the whole *-gU* expression has been put into the locative, the *-gU* form again referring to a projected action; the use of *-gU+dA* is discussed in section 4.633. In the following two sentences the form is the object of a verb of saying

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[492] *kör-*, which editors before Tekin had thought of, much less accords with the context even when taken with the meaning 'to obey'. I take *kürägü* to have been lexicalised; the context does not permit projectional *-gU* here.

[493] There are some examples for this sequence in OTWF 138; cf. also *bo ... sävgüsüz taplagusuz yarsïnčïg ätöz* (Suv 613,2) 'this ... disgusting body not to be loved or desired'. *-gUsXz* is not the negative counterpart of *-gUlXk*, as stated in Gabain 1974 § 141.

and a verb of sensing: *alkïš bašik sözlägüg, ... amv(a)rd(i)šn kïlïp yïgïngug ayu y(a)rlïkadïŋïz olarka* (Pothi 226-7) 'Thou hast commanded them to say blessings and hymns, … to concentrate one's mind and meditate'; *maytri bodisavtnïŋ ... burxan kutïn bulgusïn ... ukar mu siz?* 'Can you ... grasp that *bodhisattva* Maitreya is to ... attain Buddhadom?'.

In the last-mentioned instance the subject of the *-gU* form was in the genitive, but a construction of the shape *-gU+sI yok* has the subject in the nominative: *ig toga ketgüsi yok* (U I 45,4) 'It is not expected that the illnesses will disappear'; *mäniŋ köŋülüm yüräkim [..] sintädä öŋi ketip bargusï yok* (TT X 466) 'It is [quite] unlikely that my heart should abandon you'. *sïggusï yok ärdi* 'it could not be expected to fit in' shows the same analytical construction with abstract *-gU* transposed into the past.

Like the ones with *-sXk*, *-gU* forms can also refer to or qualify non-subject participants: In *bergü bulmatïn* (KP 10,4) 'not finding anything to give', e.g., the form refers to the direct object; this is also the task of the form *sakïnmagu* 'things not to be thought' quoted above, and of the form in *kïlmagu kïlïnč* 'a deed not to be done'. In *ayančaŋ köŋülin yüküngü ayaglïg atlïg kaŋïm mani burxan* (Pothi 2) 'my respected and famous father, the prophet Mani, whom one should worship with a reverent mind' it qualifies the indirect object, in *engü üdi yagumïš* 'the time when he is expected to descend is said to be nearing', the time adjunct. *äv* in *olorgu äv* (Ht III 739) 'a house to reside in' is the *place* of the activity referred to in the verb. In TT VA 88-98 we have three instances of *-gU* used adnominally to qualify entities which serve as instruments to the action and a fourth one referring to the action itself: *alŋadturgu sakïnč* (TT VA 88) 'meditation *by which to* weaken (the demons)', *alŋadturgu biliglär* (TT VA 92) 'notions for weakening', *ulug alŋadturgu tamga* (TT VA 94) 'the great weakening seal' and *ulug alŋadturgu iš* (TT VA 97) 'the business of the great weakening'. *ornangu* (TT I 114, M I 27,32) and *kongu* (M I 27,35) 'dwelling-place' are local. A number of examples qualify *yol* 'way', clearly used as instrument in the contexts quoted; among them we have *ozgu kutrulgu yol yïŋak* (Pothi 63) 'the way and direction to salvation', *t(ä)ŋri yeriŋä bargu ... yol* (Pothi 72) 'the way by which to go to the land of gods' and *bošungu yol agtïngu šatu bilmädök üčün* (M III nr.1 IV v14-15) 'because he knew no way to freedom and no ladder for rising'. In the following three instances the *-gU* form qualifies the means to an end or the material, i.e. an instrument: *tükädi n(ï)gošaklarnïŋ suyïn yazokïn öküngü xwastwan(i)vt* (Xw 221, ms. B) 'The Xw., with which the

auditors are to repent their sins, has ended'; *kaltï uz kiši uzlangu äd bulmasar* ... (M I 17_1) 'when, e.g., a craftsman does not find the material to carry out his craft (with) …'.

-gU forms can also be used predicatively, as in *bo yertinčö yer suvdakï tïnlïglar birök burxan körkin körü kurtulgu ärsär* ... (U II 17,26) 'If, now, (any) creatures in this world are to be saved by seeing the figure of Buddha, ...'; this is followed by *pr(a)tikabut körkin kurtulgu tïnlïglar ärsär* (U II 17,28) 'If they are creatures to be saved through the appearance of a *pratyeka-buddha*, ...', where the *-gU* form is attributive. Similarly *sinxadivipka bargu ärsär suv yolïn barmak kärgäk siz* (HtPar 108r19 quoted in the note to Ht II 1870) 'If (you) are to go to Ceylon you have to go by sea'.[494] The construction of these two sentences, where the subjects are referred to by nominals in the nominative case, should be compared to *sözläšgüŋ ärsär* discussed above, with the possessive suffix referring to the subject. There, the *-gU* form was taken to refer to the content of a future discussion; it could also refer to the projected event.

-gU also appears within the construction in *-gU ol* referred to in section 5.2, which expresses obligation or advice. The analytical form *-gUčA ärsär* is discussed among the conditional constructions in section 4.64. *nägü ... bulguča bolsa* (SUK Ad3,16) is 'whatever one can find of ...'.

-gU täg signifies 'suitable for the activity denoted by the verb': *tarïg tarïgu täg ädgü är karabaš* (ZiemeSklav III 14) 'a male slave good for working in the field', *tapïngu täg kïz karabaš* (ZiemeSklav III 16) 'a female slave suitable for service', *kïlmagu täg nä nägü iš* (U III 54,13) 'some unsuitable piece of behaviour'. '*korkgu täg yalïnlar* (MaitrH XX 1r18) are 'frightful flames'; the meaning of *korkgu täg* (attested also e.g. in TT X 362 and DKPAMPb 81) should be similar to *korkïnčïg* (formation discussed in OTWF section 3.311). *-gU täg* is also put to predicative use: *oglanlarïmnï bulmatïn älvirgü täg bolur män* (BT XIII 2,48) 'Not finding my children (i.e. if I didn't find them) I would be as if in a rave'. *alïmčïlarïm ma tälim bolup turgu täg bolmayïn kačïp yašïp* ... (SUK Mi19,4) signifies 'my creditors also having become numerous (the situation) was not suitable for staying around and I fled and hid and ...'. From this comes Rabġūzī's use of the phrase *-gU täg turur* in the

[494] Gabain reads *krgäksiz* and translates this as 'braucht man nicht'. In view of the fact that Ceylon is an island, I have here followed Anderson 2002 § 1.1.3 in taking *siz* not to be the privative suffix but the 2nd person plural pronoun, on assuption that the Chinese text is compatible with this. There is no need to take *-gU är-* to be an auxiliary construction, as Anderson did in the lecture referred to.

meaning 'to intend / to be ready to carry out the main action' (documented in Schinkewitsch 1926: 100). The meaning 'suitable for doing' appears to have moved towards 'in order to do' in the example *yetip ikiläyü yangïnča yetgü täg kälir oglanïg* (BT XIII 2,44) 'Till (I) get (there) and come back again (someone) could come and might lead the children off': The accusative object *oglanïg* is here governed by *yet-*, showing that *yetgü täg* functions as a verb phrase although it is also a postpositional phrase. This construction developed further in Middle Turkic; Brockelmann 1954: 247-8 gives numerous examples from the QB and a great variety of Middle Turkic sources.[495] Cf. also the sequence *-gU täg ärmäz* expressing impossibility, dealt with in section 3.253.

The sequence *-gUlXk täg* is attested e.g. in M III nr.7 II v1, in *eligkä yaraguluk täg yontug arïtïrča* 'as one cleans a horse which would be suitable for a king'; there are other examples in M III nr.5 r4. See section 4.636 (on final clauses) for the use of the analytical forms *-gU üčün* and *-gU+kA*.

In *-gUlXk* e.g. in *nomumïn išidgülük küsüš* (MaitrH XV 2v1) 'the wish to hear my teaching', it seems as if the suffix *+lXk* (described on p.147 above) has kept its meaning, as the wish is directed, as it were, towards future hearing activity. *kudïkï bolguluk savlar* (BT II 232) are 'matters to be disparaged', *sözlägülük savlar* (BT II 257) 'things one is to say'. Manichæan texts also have such forms e.g. 4 times in TT II,2 41-44. *-gUlXk* forms can be used predicatively, e.g. *näčä täŋlig kalïn küčlüg yavlak yäk ičkäk bolsarlar, bodisatv ugušlug elig bägniŋ äŋ mïntïn ätözintäki bir ävin tüsiŋä ymä ada tuda tägürgäli uguluk ärmäzlär* (U IV A 260) 'However numerous, powerful and evil *pretas* and *bhūtas* there might be, they would not be able to do any harm even to a single hair on the body of the king of *bodhisattva* lineage'. Now consider the sentence *küsüšüm ol ötüngülük / tolp yertinčüg yarotdačïka* (Suv 372,12)[496] 'It is my wish to pray to him who brightens up the whole world': The *-gUlXk* form has here become the predicate of a nominal sentence and refers to activities the speaker considers to be desirable, in accordance with the function of this fused suffix. In the following example, the *-gUlXk* forms, with possessive suffixes referring to the

[495] The sequence subsequently fused to give *-gUdäg*; Brockelmann 1954: 248 quotes Nawā'ī as defining it as a special form for expressing conjectures. *-gAdAg* lives on in Tuvan or in Khakas, expressing the same content of 'it seems, it looks as if'.

[496] This is a verse passage, whence the unusual word order. Cf. the sentence quoted at the end of section 4.8.

object of their verbs, themselves refer to the action (*bil- uk-*) which is expected to be carried out: *keŋ yörüg kültülar. bilgülükin ukgulukïn ornatu tükätip* ... (Ht VIII 72) 'They set forth a detailed commentary. Having finished to determine how they (i.e. the teachings) were to be understood, …'. The same can be said of the following example, which even has a 2nd person possessive suffix: *udumbar čäčäk täg alp tušgulukuŋuz üzä taŋlančïg ärür siz* (Suv 654,5) 'You are marvellous by being as difficult to come by as the *udumbara* flower'.

Section 3.312 in OTWF deals with the composite suffix *-gUlXksXz*, the formation there being called 'the negative modal oblique'. Its content should not be confused with that of *-mAgUlXk* (attested e.g. in HtsPar 14 r22 and Suv 6711,17): When used predicatively, the latter expresses the speaker/writer's attitude with respect to the non-desirability of a proposition, while *-gUlXksXz* qualifies nominals as related to such an attitude on the part of the speaker.

Orkhon Turkic and Uygur *-gUlXk* can form small clauses with 'difficult' or 'easy' as predicate: *yuyka kalïn bolsar topolguluk alp ärmiš* (Tuñ 13) 'If thin gets thick it is hard to pierce, they say'; in a rather similar phrase, *bo inmelun šastr ärsär ärtiŋü täriŋ alp tüpkärgülük ärür* (Ht VIII 152) 'As for this Ying ming lun *śāstra*, it is exceedingly profound and hard to fathom'. *učuz bulguluk* in *ol barča učuz bulguluk ol* 'All that is easy to find' (DKPAMPb 358) is constructed in the same way as *alp tüpkärgülük* of the previous example. In *tïnlïglarïg ütläyü ärigläyü alp kutgarguluk üčün* 'because it is difficult to save living beings through advice and admonishment' (DKPAMPb 115) we find a similar small clause – again with *alp* as predicate – governed by the causal postposition or conjunction.

The projection participles never qualify or refer to subjects, which the imperfect participles generally, the perfect participles sometimes do. The label of 'projection' attached to the forms of this section is to be understood as an either epistemological or volitional orientation towards possible future events. *kün tugsuk* and *kün batsïk* are the directions in which one *expects* the sun to rise or to set with no volition attached; *maytri bodisavtnïŋ ... burxan kutïn bulgusï*, similarly, refers to something *expected* to happen in the future. *el tutsuk yer* on the other hand, is the place which the speaker considers to be *best suited for* the activity of ruling; *olorgu äv* a house to reside in, one *suitable for* residing. *sözlämäsig ... söz* are words one *should* not utter, *kïlmagu kïlïnč* something one *should* not do. *bergü* is something to give, *intended* for giving. *tïnlïglarïg kutgargu* refers to the *project* of saving creatures, something one *plans* to do.

3.285. The prospective

The imminent future form in *-gAlIr* is difficult to classify among the parts of speech: It is never found as an attribute, nor ever as the head of a nominal phrase and thus is never, in fact, a participle in any narrow sense. It is either used predicatively with pronominal subject (like Turkish *-Iyor*) or governed by postpositions or by *ärkän* 'while' (which otherwise governs locatives, *yok* 'non-existence' and the aorist). The uses of finite *-gAlIr* (attested in that function also in DLT and QB) are discussed in section 3.26. Its most common non-finite use is to be governed by *üčün*, e.g. in *koluŋalarïn ädäddürgälir bädütgälir üčün* (BT III 77) 'in order to let their shoots materialize and grow' or *män ol ... köni kertü savïg közädgälir üčün* (U III 68,31) 'so that I might document that true statement'. A few sentences before the last expression (U III 68,22) the same speaker says *agïzïmtïn ünmiš köni kertü savïg közädgäli barayïn* with the same verb, signifying 'Let me go to document the true statement which I uttered'; this highlights the similarity between the suffixes *-gAlI* and *-gAlIr* (which perhaps comes from *-gAlI ärür*). Note that *-gAlI üčün*, *-gU üčün* and *-gUlXk üčün* also appear in final clauses, *-gAlI* being the supine suffix and the forms in *-gU* and *-gUlXk* necessitative participles. In the example *častanï eligig ... siŋirgälir osoglug kïlïnïp* (U I 41) 'they behaved as if they were about to swallow king Č.' we find *-gAlIr* governed by the postposition *osoglug* 'similar to'. We further have (Suv 536,14) *bo darnïg sözlägälir ärkän* 'while about to pronounce this *dhāraṇi*'; another example of *-gAlIr ärkän* is quoted in section 4.633.

3.286. Converbs

Converbs are verb forms used adverbially or, especially in the case of *-(X)p* and *-(X)pAn*, used within a sequel of clauses forming a sentence, linked so that their content comes to be understood as coordinative. There are two types of exceptions in which we find converbs in adnominal use: One is the construction with vowel converb found in *tik-ä kulgak+ïn* 'with cocked ears', discussed below in this section, where the whole phrase *is* adverbial. The other is the use of *är-ip* and *bašlap* linking two attributive satellites to each other; see the end of section 4.122 for *ärip*.

Converbs' subjects are often identical to that of the verb to which they are subordinated; when they do have their own subject it appears in the nominative. A third possibility, when no subject is stated, is that the clause's content is meant to hold for any appropriate entity as

subject; a fourth that the subject should be supplied by the addressee or reader from out of the context. Thus, when, at the beginning of a letter but after the address, we find the sentence *adrïlgalï yirilgäli ärü ärü [ür] keč boltï* (Ht VII 2064) we know that we have to translate 'Bye and bye[497] it has become a long time since (*you* and *me*) were separated and torn apart' although the converbs in *-gAlI* are not accompanied by any explicit reference to a subject.

From the morphological point of view we can classify converb suffixes into ones that are opaque and such that show, in various degrees of transparency, that they come from some other form. Some elements bringing verb stems into adverbal function are in fact not mere morphological forms but whole phrases, in which nominal verb forms are governed by a postposition. We shall here list all converbs and discuss their morphological aspect; we start from opaque converb suffixes, adding their various evident or putative derivates, then mention converbial derivates from verbal nominals. The functions and syntactic uses to which all these are put are dealt with in section 4.63 ('Clauses as adjuncts'). Adjunct clauses can, in Old Turkic, also be formed without resorting to simple or complex converbs, by using conjunctions; such structures are not mentioned in the present section. The conditional suffix dealt with in section 3.287 is actually also a converb suffix at least in the runiform inscriptions: We have already, in connection with *-(X)p,* granted that converb clauses can be highly independent syntactically; the *-sAr* form is a converb in that it has neither verbal nor nominal inflexion and is used adverbally. It does, however, become increasingly linked to the category of subject person already at a very early stage and moves towards finite status in the course of the development of Old Turkic.

The most common converb suffix appears to be *-(X)p*.[498] It is further discussed in 4.631, the section on the use of contextual converbs. Clearly related to it morphologically is the suffix *-(X)pAn*, also discussed in that section. *-(X)pAn* is used in runiform inscriptions (e.g.

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[497] *är-ü*, the vowel converb of the copula, is only attested in lexicalised *ärü ärü* 'gradually etc.'.

[498] Johanson 1988: 136 quotes several unacceptable 'etymologies' for this suffix, says "we shall refrain from adding new proposals here" and then does add a new proposal in the long footnote immediately attached to this sentence. Johanson's proposal is unacceptable as well, as it is based on an intermediate form *'-yUb'* (to be derived from a Mongolian converb suffix ending in *U*); such a form is not and cannot have been attested, as there is no trace of a 'buffer *y*' in Old Turkic, nor indeed anywhere outside Oguz.

el örginin anta örgipän etitdim 'I set up the national throne there and had (the place) arranged' in ŠU), rather commonly in the runiform ms. IrqB and in Manichæan texts (e.g. *äzü]g savïŋa arïlïpan* 'cheated by her false words' in BT V 277, *ay täŋri ordosïnta enipän,* l.9 of the hymn edited in *UAJb N.F.* 16:221-2, 'coming down from the palace of the Moon God'). *kara xanka barïpan, yalavač barïpan kälmädiŋiz bägim-ä* in the epitaph E30 tells of a South-Siberian nobleman who went as a messenger to the Qarakhanid ruler and did not return. There are also a number of examples in the DLT in verse. This not very common form and the even rarer *-(X)pAnXn* (early Uygur, Manichæan and Buddhist) are discussed in Johanson 1988, who quotes a number of examples. Among the etymologies quoted or suggested there for *-(X)pAn*, the only possible one seems to be the segmentation **-bA+n*, i.e. that it should be formed with the instrumental suffix *+(X)n* as in *-mAtI+n* discussed below. Another possibility is that *-(X)pAn* comes from *-(X)pAnXn* by haplology; that (attested e.g. in *ukupanïn* in Maitr 23r12, *körüpänin* in MaitrH Y 194) would come from *-(X)p anïn*, i.e. from the instrumental form of *ol* used in the meaning 'thereby' beginning the superordinate clause, secondarily adapting to synharmonism as the two fused: Johanson stresses the instrumental meaning of these two forms as against the other Old Turkic converbs including *-(X)p*, and in UW 142 we find a number of examples for the 'superfluous' use of *anïn* after subordinate clauses. IrqB 35 can be read as *kugu kuš kanatïŋa urupanïn kalïyu barïpan ögiŋä kaŋïŋa tägürmiš* or *kugu kuš kanatïŋa urup anïn kalïyu barïpan ögiŋä kaŋïŋa tägürmiš* and in both cases signify 'The swan put him on his wings and so rose in the air and brought him to his parents'. Johanson 1988: 146 quotes three DLT cases of *anïn* written separately after *-(X)p* forms; these passages, which he interprets as instances of wrong spelling, in fact agree with the use of *anïn* in Uygur and go a long way towards explaining *-(X)pAnXn*. The problem with the Johanson hypothesis is that *-(X)pAn* by no means always has instrumental meaning; in Xw 134, a rather early text, its use is temporal or conditional: *öŋrä nä bar* (*ärmiš* in a ms.) *tepän biltimiz* clearly means, in its context, 'We know what there was (or 'what there is said to have been') before that' or perhaps, more literally, 'If one said "What was there (or "What is there supposed to have been") before, we know (the answer)'.[499]

A construction of the form *nä* + *-(X)p* converb + *Ok* appears to have exclusively temporal meaning; see section 4.633.

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[499] The *te-* form corresponds to Turkic *diye* or *dese*. The three subsequent sentences have the same structure though they contain different interrogative clauses.

In BT XIII 1,96 we find the verse *yagïz ye[r] täŋinčä särip siz* in quite fragmentary context, translated as "über die ganze braune Erde seid ihr ausgedehnt".[500] This should be an instance of a verb phrase of the shape *-(X)p* with pronoun, which is put to finite use in some modern Turkic languages and in Middle Turkic (cf. Brockelmann 1954: 313 §g); I have not come across any other such instance in any variety of Old Turkic, including Qarakhanid (though *-(X)p är-,* discussed in section 3.251, appears not to be all too rare).

Another contextual converb suffix is that of the vowel converb, most of whose uses are discussed in the sub-sections of 3.25 and in 4.631. It has the variants *-A*, *-I, -U* and *-yU* alternating as in the aorist form, i.e. *-yU* after bases ending in vowels, *-A* after most underived bases ending in consonants and after some (generally intransitive) formatives, *-I* after the *-(X)t-* causative suffix and *-U* with most other derived bases ending in consonants; see Erdal 1979b for more details. I am using the term 'vowel converb' as this distribution (like that of the aorist) cannot be summed up with a single archphonemic representation. E.g. inscriptional *bodunumun ter-ä quvra-t-ï altïm* 'I brought together my nation and ruled them' and *säläŋä käč-ä udu yorïdïm* 'Crossing the S. I marched after (them)'. The vowel converb suffix can get fused with the verb *u-ma-* 'to be unable to'; when it precedes this auxiliary, its vowel is generally /U/ in Uygur also with verbs which otherwise have *-A* or *-I*.

It has been stated that the juncture between vowel converbs and main verbs is especially close, but the fact is that vowel converbs of early texts are quite independent prosodically (as in the examples quoted). On the other extreme there also are cases of incorporation, e.g. in nominalisations like *körü kanïnčsïz* or *ešidü kanïnčsïz* (q.v. in OTWF 354), where the suffix *-(X)nčsXz* is added to the complex verb phrases *körü kan-* 'to have seen enough' and *ešîdü kan-* 'to have heard enough'.

Vowel converbs are sometimes part of the verb phrase, the converb being adjacent to the finite verb; they then do not serve as independent kernels for clauses. In some of these cases the main verb is in fact an auxiliary expressing the category of actionality or the like, an auxiliary of politeness (e.g. *ögrünčülüg sävinčlig bolu täginip* in TT VI 458 'they

[500] Better perhaps 'You have been showing endurance like the brown earth'. The beginning of the following verse is lost, but in none of the more than 100 interpretable lines of the poem is there any instance of a word divided between the lines. *särip sïz* as imperative makes no sense either, especially since another sentence in the context also shows the polite plural address to a *bodhisattva*.

– deferently – got exceedingly joyful') or the two verbs have a new, fused meaning; see sections 3.25 (with subsections) and 5.3.

When considering the functions of vowel converbs one should also disregard cases of lexicalisation, when petrified converbs like *yan-a* 'returning' → 'again, moreover' *tap-a* 'finding' → 'towards' and numerous others got into quite different parts of speech. The OTWF mentions numerous petrified converbs coming from secondary verbs, e.g. from causatives, which became lexemes in their own right. Classes of vowel converb forms or vowel converb constructions have, moreover, come to express grammatical categories, as the similative case in *+lAyU*, perhaps the directive in *+gArU* or, in the verbal domain, the construction consisting of the vowel converb followed by the postposition *birlä* which refers to events preceding the main event by a short time interval. In some cases, finally, elements by scholars like Bang or Gabain thought to be original vowel converbs never were representatives of this morphological class: Such are *kud-ï* 'down' (dealt with in Erdal, 1991: 341) or *tüzü* 'all' (which is probably a simplex): As shown in Erdal 1979b, the vowel of the vowel converb suffix is strictly determined, mostly by the morphological class of the stem. Anything which does not have the appropriate vowel[501] or for which no appropriate base can be made out is not a vowel converb.

In adjunct phrases such as *äŋitä ät'özin* 'with bowing body', *külčirä yüzin* 'with smiling face', *titräyü ünin* 'with a shaking voice', *yašru köŋlin* 'with secret intentions' or *tikä kulgakïn* 'with cocked ears', the vowel converb is used adnominally; the head of this construction is in all cases an inalienable part of the subject of the verb.[502] The instrumental suffix, clearly characterising the phrase as a whole, marks the whole phrase for its adverbial function in its context. *tuga täglök kiši* 'a person blind from birth' in MaitrH XV 6v9, U II 29,14 and 31,41, U III 76,13$_1$ and 77,20 is a different structure; the form here qualifies an adjective and not a noun (cf. *tuga közsüz,* same meaning, in the Middle Turkic Tafsīr).

In the following Maitr passage, which is about an interpretation of dreams, we have further evidence that the vowel converb apparently did have non-adverbal functions with imperfect meaning: *kim äv täŋrisi ordo waxšiki ünmiš tüšämiši antag ärür: ... nä tišläri tüšä tüšämišiniŋ tüši antag ärür: ... kim oronluk yerkä tüšä t[okür] yuplunup tüšä tül*

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[501] Some of the "ausnahmsweise" instances in Gabain 1974: 121 are simple errors; *tükün-i* (from TT I 126), e.g., is a mistake for *tükäti* and *oŋal-ï* is in fact a *-gAlI* form.

[502] See OTWF 770 with footn. 506 for documentation and discussion and cf. Röhrborn 2000: 271.

kördi, ... nä ymä ton kädimtä [a]drïlmïš kördi, ... (MaitrH XIII 4v7-19) 'That she dreamt that the house deity or the palace spirit had left is as follows ... The result of her having dreamt that her teeth were falling out (*tüš-ä*) ... That she saw a dream of the throne falling (*tüšä*) to the ground and her bun disintegrating and falling off (*yuplunup tüš-ä*) ... That she saw (herself) separated from (her) clothing ...'. The activities seen in the dreams and made the objects of the verbs *tüšä-* 'to dream' and *kör-* 'to see' are expressed by the verb forms *ün-miš*, thrice *tüš-ä* and *adrïl-mïš*; the first and third present the activity as having been accomplished while the instances of *tüš-ä* may be presenting a view of it as still going on. Here, then, the vowel converb is used as a participle referring to an event, like the aorist.

A converb suffix '*-čA*' has been read in BQ S9; a converb of this shape is postulated already in Thomsen 1916: 82-84, followed by Gabain 1941: 116 (§223)[503] and Doerfer 1993: 30. This may in fact be a composite form, consisting of the vowel converb with the equative suffix; that would give the reading *bol-(u)+ča* in that passage and *yogur-(u)+ča* in Tuñ 26. *boluča* appears also in KT SW as completed by Matuz in *Turcica* 4(1972): 15-24, in the passage *] b(ä)g(i)m teg(i)n yüg(ä)rü* (or *yüg(ü)rü*) *t(ä)ŋri bol(u)ča*, where *täŋri boluča* as well as *yok boluča* of BQ S9 both signify 'after he died'. Tekin 1968 translated the passage *öŋräki är yoguruča*[504] *ïďïp ... ašďïmïz* as "having sent the vanguard forward as if kneading (the snow), we climbed ...", and has adhered to this translation in his reeditions of the inscription in 1994 and 1995. Thomsen 1916: 82-84 had discussed the passage and interpreted the function of this form and the meaning of the verb correctly. This was apparently not noticed by Clauson since EDPT 906a is quite off the mark; see OTWF 755 (and 354) for the (quite solid) evidence for *yogur-* 'to open the way, cross a dangerous or difficult area', a meaning which Thomsen had already determined (although his interpretation of the clause is not, I think, satisfactory).[505] I would translate the passage as 'After the vanguard opened the way (through the Sayan mountains, I) sent (the army) off and we went over the ...'. A

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[503] The form '*tirčä*' in BQ W4 mentioned there should be read as *ät-är+čä*; it has nothing to do with this converb, since it comes from an aorist.

[504] He reads this as '*yogurča*' and on p.74 declares it to come from '*yogururča*' by haplology. While a haplology of aorist forms of the shape °*Ur-Ur* is indeed attested in non-canonical Uygur texts (see section 2.412 above), there is no inscriptional evidence for the phenomenon.

[505] It is probably related to *yoːl* 'way' (with long vowel in Tkm.), *yoguč* '(on) the other bank (of a river)' etc. and not to be confused with the verb spelled the same way signifying 'to knead'.

converb of this shape is not attested anywhere else in Old Turkic,[506] but a construction in which the vowel converb is used adnominally was mentioned above, and Uygur has it together with the postposition *birlä*, which we mention straightway. Its meaning seems to be quite close to that of this one; since the vowel converb is attested in the equative only in Orkhon Turkic and with *birlä* only in Uygur, it may well be that the latter replaced the former.

When the vowel converb is followed by *birlä* we get a temporal converb phrase quite well attested in Uygur, discussed in section 4.633; it gives the meaning 'soon after'. The relationship between the vowel converb and *birlä* need not have been one of government: As other postpositions in Old Turkic (and e.g. *sonra* in Turkish), *birlä* can govern zero anaphora, in which case it is, to all intents and purposes, an adverb signifying 'therewith, together with that'. The construction in question probably came from a converb followed by *birlä* as adverb (similar to what may have happened with *anïn* as discussed above), giving the meaning 'carrying out $action_1$ and (practically) together with it ($action_2$)'. *birlä* is, in this construction, often followed by the particle *Ok* (e.g. *alu birlä ök* in ETŞ 16,62, "alır almaz"), since it describes events immediately preceding the main action; it is this immediacy that gets stressed by *Ok*.

None of these converbs is negated with *-mA-*;[507] their negative counterpart is suppletive, using the suffix *-mAtI(n)*. The runiform inscriptions have *-mAtI* in KT E 10, Toñ II E2 and ŠU E3; *-mAtIn* is spelled with t^1In^2 in KT S9, with t^1In^1 in ŠU E10 (fragmentary) and S1 and with t^1n^1 in E28,2 (l.5 in the edition of Kormušin 1997: 80).[508] The best explanation for the /n/ is that it is the instrumental suffix: That is, beside being a nominal case suffix, added also to the converb suffix *-(X)pAn*, to the case suffix *+lXgU*, to the postpositions *birlä* and *öŋi* and so forth. *-mAksXzIn,* a late equivalent of *-mAtIn*, is also, after all, in the instrumental case. Was there ever a converb suffix of the shape *-tI*?

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[506] The Old Anatolian Turkic converb suffix *-(y)IcAk* signifying 'when' could very well come from this suffix together with the particle *(O)k*.

[507] There are a few exceptions, e.g. *u-ma-yu* in BT II 266, *körmäyü* in TT VIII A28, *ilinmäyü* in TT VIII A40 and Middle Turkic *bulmay* (thus!) in KP X,5.

[508] Schulz 1978: 214 finds this spelling "merkwürdig" and thinks it may mean that the suffix was here to be read with A in the last syllable; in fact, implicit vowels can also be read as X in standard runiform spelling: What this instance means is only that the writer of the inscription apparently no longer knew the form *-mAtI* and could not know that the second vowel of *-mAtIn* had originally been a final vowel.

Some of the petrified formatives of this shape, discussed in OTWF 797-798, may in fact not have been related to any *-(X)t-* causative but be petrified forms of the direct positive counterpart of *-mAtI*; this may be the case e.g. with the conjunction *ulatï*, since *ula-t-* is apparently not really attested in Old Turkic proper.[509] T.Tekin 2002 wants to explain the suffix through the Tunguz verb of negation + a gerundial suffix *-tI(n)* which, he says, "is found only in the structure of the Uigur adverb *näçöklä-ti* ~ *näçöklä-di* 'doing how, doing in what way or manner".[510] I think *näčükläti*, *nätägläti* and *kaltï* were not formed with *+lA-* and a converb suffix but with adverbal *+lA* and *+tI* (taking these to have been distinct). Tekin is, however, right in referring to the Khaladj converb suffix *-di* / *-ti*, corresponding to common Turkic *-(X)p* in that language. The question of which alveolar *-mAtI* had is discussed by Johanson 1979: 137-139, Maue 1983: 55-56 and Tekin. It is always spelled as T in runiform sources and mostly as T in Manichæan ones as documented in Zieme 1969: 168.[511] On the other hand, the Maitr mss. edited by Şinasi Tekin, which are also quite early, have 19 instances spelled *-mAdIn* as against only 5 spelled *-mAtIn*. Brāhmī sources show *ilinmätin* in TT VIII A28 but *sö[zlä]šmädin* (spelled with *dh*) in C11. The alveolar of *kïlmadïn* in TT VIII G44 is the character transcribed as δ, which definitely belongs to the phoneme /d/. In the DLT this suffix is spelled with *dāl* and not *dhāl*. In the QB, which also spells the suffix with *dāl*, we find not only *-mAdIn*[512] but (twice) also *-mAdI* (e.g. *bilmädi* 'without knowing' in 4187). The Qarakhanid forms speak for [d] as intervocalic allophone of /t/ in this sufix, as these sources do not confuse the two consonant series. We adhere to *-mAtI(n)* as phonological spelling, noting that the phonic realisation of /t/ as [d] here probably holds not only for Qarakhanid but also for earlier stages of the language.

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[509] Johanson 1979: 21 thinks it is "eventuell möglich" that there should be a positive gerund [Ti] in the form [tökTi] in the passage *tün udïmatï küntüz olormatï kïzïl kanïm tükäti kara tärim yügürti esig küčüg bertim ök* (Tuñ 52) 'Not sleeping by night and not resting by day, squandering my red blood and letting my black sweat run, I constantly gave my services (to the ruler)', which, he thinks, could be *tök-ti* 'pouring out' or *tök-üt-ti* 'letting get poured out'.

[510] See section 3.134 above.

[511] Among the instances he mentions, 23 have *t*, 4 *d* and 3 *dd*. The exceptions appear in Xw, TT II B and Pothi, which in other cases also occasionally confuse the alveolars; all three instances of *dd* are from Pothi.

[512] *bilmädin* 634, *yermädin* 592. Spelled with *t* in the late ms. in Uygur script.

Forms formed with *-mAksXzIn,* a rather late suffix composed of the infinitive, the suffix of lack and the instrumental, are documented in OTWF 397-8; it is more or less equivalent to *-mAtIn*.

There is a converb form in *-(X)yXn*,[513] attested four times in runiform inscriptions, beside *te-yin* 'saying; in order to, etc.', of which there are nearly forty examples. *-yXn* and *-(A)yXn* are other possible shapes for this suffix; the former is preferred by Doerfer 1993: 26. This great number of examples for this particular form, in Uygur replaced by *te-p* with a different converb suffix, is not surprising: It reminds us of Republican Turkish *diye* which, in the same functions as Orkhon Turkic *teyin* and Uygur *tep*, underwent petrification.[514] Among the other *-(X)yXn* forms we find *süŋgülüg kandan käl(i)y(i)n sürä eltdi?* 'Where did armed (men) come from to drive (you) away?' (KT E23) and *kara bodun tur(u)y(u)n xagan atadï, täŋridä bolmiš el etmiš bilgä xagan atadï* (Tariat S5; similarly S4) 'He named him kaghan in the presence of the common people and gave him the title of "... kaghan"'. This form is different from the previously mentioned ones in that it can be negated: *-mAyXn* is found, e.g., in *türk bodun xanïn bolmayïn / bulmayïn tavgačda adrïltï.* 'Not being with' or 'not finding its khan, the Turk nation separated from China' (Tuñ 2).[515]

We again come across the form in *kälmäyin anta ok tursar sän* 'if you do not come but stay right there' in UigBrief C11, a late Uygur letter.[516] Further in contracts in SUK: *alïmčïlarïm ma tälim bolup turgu täg bolmayïn kačïp yašïp ...* (Mi19,4) 'my creditors also having gotten numerous it became impossible to stay around and I fled and hid and ...'; *oronïn yegin kïlmayïn ädgü tutmayïn kudï asïra kišičä tutsar män*

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[513] Johanson 1988: 137 (n.15) spells it as *-(y)Xn*; this is not only contrary to facts (since the /y/ is not dropped after consonants), it also contradicts morphophonemic structure, in that Old Turkic knows no 'buffer *y*'. The participle suffix *-yOk* is a suffix starting with /y/ and not dropping it after consonants. The thoughts around this converb form in the n. to TT II,2 26 are obsolete.

[514] This term is in order in view of the fact that the vowel converb is, in Turkish, always doubled when in living use.

[515] The suffix is here spelled with n^2 in spite of back synharmonism; this is not so surprising, however, as we also find *bat-sïk+ïŋa* (KT S2; suffix *-sXk*) or *yagï+sïz* (KT; suffix *+sXz*) spelled with s^2.

[516] The form *kaygu* < *kadgu* 'sorrow' also found there shows that this text had already undergone the passage d > y; most other intervocalic *d*s in that text belong to the Old Turkic phoneme /t/. Other late characteristics are the particle *mA* used after nouns (and not just after pronouns), *tur-* used as copula, *+nI* as accusative suffix for nouns, *-gUl* as suffix for the 2nd person imperative (replacing older *gIl* under the influence of the contraction of *-gU ol*) and *özgä* (spelled with *s*) 'other'.

(Ad3,21) 'if I do not ameliorate his position, do not keep him well but treat him as an inferior person'; there is a further instance in Mi21,5. This late revival could mean that *-mA-(X)yXn* got fused with *-mAtIn* and *-(mA-)yU*, perhaps together with analogy from the instrumental suffix. *-mAyIn* lived on in Middle Turkic, e.g. in the Codex Comanicus forms *ar-mayïn* (150,4), *yät-mäyin* (138,7), *är-mäyin* and *bil-mäyin*.[517] *-mAtIn* is unlikely to be behind these forms by itself though the /t/ may have gotten realised as [d] even at an early stage, as the sound change *d* > *y* applies only to original /d/. Johanson 1979: 138-139 is right in defending the view that *-mAtIn* and *-mAyIn* are unrelated, against Menges, Korkmaz, Brockelmann 1954: 253 and Ščerbak 1961: 160 and in connecting the former with general Oguz *-mAdAn*.[518] He also quotes the form *aδïr-mayïn*, with both /d/ and the *y*-suffix, from the Rylands interlinear Coran translation (which supports the view that the two converb suffixes cannot have simply converged). Cf. further *-mAtIn* in *bir kodmatïn tükäl sanap altïmïz* 'we have not left (even) one but have counted and taken them all' (SUK Sa9,12) and *tägmätin* (SUK WP1,5).

The converb form in *-gAlI* has two main functions, one temporal (discussed in section 4.633), the other one 'final'; the final function (for which see section 4.636) is akin to the use of *-gAlI* as supine suffix (details in section 4.23). A few instances which appear to have consecutive meaning are quoted in section 4.637.

The negative counterpart of *-gAlI* is rather rare; examples are *yogulmagalï* (HtPar 55 v13), *atamagalï* 'so as not to pronounce' (Ht III 399, in final use) or *küsäyür män käntü özüm anïtmagalï* 'I wish I would not let myself remember' (supine use).

-gAlI is also part of verb phrases: *-gAlI är-*, *-gAlI tur-* and *-gAlI alk-* express actionality (discussed in section 3.251) while *-gAlI bol-* or *-gAlI u-* express ability (discussed in section 3.253). Here again, as in some constructions just referred to, the meaning is neither final nor temporal but more similar to the English infinitive (as pointed out by Nevskaya 2002) or to the Latin supine; see section 4.23.

The meanings of *-gInčA*, 'as long as' and 'until', make it likely that it comes from the formative *-(X)g* with the 3rd person possessive suffix and the equative case ending. This etymology is hypothetical, as *-(X)g*

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[517] The QB forms *bol-mayïn*, *kör-mäyin* and *säv-mäyin*, which were by some also thought to represent this form, are negated volitives, i.e. finite. This is also how they are translated in Dankoff 1983. The *-mAtI(n)* converb appears in the QB as *-mAdI(n)*.

[518] Early Anatolian Turkish has *-madIn* as well.

is, in the language we have, not a flexional but a derivational suffix (albeit the most common suffix for deverbal nominals).

The subjects of *-gInčA* forms are more often different from than identical to the subject of the main verb. *turgïnčara* in Höllen 21 has been taken to signify 'as long as (they) stay (there)'. It is probably a contraction from *turgïnča ara*, with the postposition *ara*; the case suffix *+rA* is unlikely to have been added to such a form. *-gInčA ara* is not attested, but we have *bošumagïnča titmäginčä ikin ara* (Abhi 1398-99) 'as long as they haven't sent them off and given them up'. The quoted passage shows two examples of *-mA-gInčA*, which would be incompatible with the etymology proposed if they were to appear in an early text. Other negative examples are *üč yïl tükämäginčä* 'as long as three years are not over' (SUK P1,23) and *bilgä ärmäginčä* (Ht VII 25) 'as long as one is not wise'.

The meanings and functions of *-gInčA* are discussed in section 4.633 on temporal clauses. Two proverbs which turned up in very different sources have a different, comparative meaning for this suffix: *öküz adakï bolgïnča buzagu bašï bolsa yeg* (DLT fol.41) 'Better to be the head of a calf than the foot of an ox'; *mïŋ kiši yüzin bilginčä bir kiši atïn bilgü* (runiform ThS III a5 with the emendations of Bazin in *Turcica* 4 (1972): 37) 'Better to know the reputation of one person than the face of a thousand'. This meaning of the suffix relates more directly to the usual ones of *+čA* than the temporal uses of the suffix.

The subjects of the contextual converbs (see section 4.631) and of the *-gAlI* form are generally identical to those of the main clause, though there are some clear exceptions of various types. In this matter they differ from *-gInčA* and *-sAr* but are similar to the secondary converbs.

Beside the synthetical converb forms we have secondary converbs consisting of nominal forms of verbs in oblique cases. The following all have temporal content and are therefore all discussed in section 4.633 as to their functions and uses: *-dOk+dA*, very common both in runiform inscriptions and in Uygur, and *-mIš+tA, -Ur+dA* and *-GInčA*, none of which are attested in the inscriptions. *-dOkdA* can also be used with the possessive suffix referring to the subject placed before the case suffix, as can *-UrdA* and *-mIštA*; e.g. Orkhon Turkic *eli kamšag boltokïnta* (KT N3) 'when his realm had become shaky' or Uygur *tütsüg yïdïn tuydokumuzda* 'when we feel the smell of incense' (Suv 424,18). The QB also uses both *-dokdA* and the aorist in the locative case for temporal expressions. It is not, of course, evident that any perfect

participle in an adverbial case form has to be an instance of a secondary converb suffix.[519] Forms in *-gU+dA*, e.g., could be both a secondary case suffix and the mere sequence of *-gU* and *+dA*; more research into the actual distributions is needed.

The dative case is also used for forming complex temporal converb suffixes, with *-dOk* and possessive suffix in Orkhon Turkic, with *-mAk* and the possessive suffix in Uygur. Clauses around *-gU+kA*, on the other hand, have final content. *-mIš+kA* and *-mA-yOk+kA* serve as kernels for causal clauses, sometimes with possessive suffix referring to the subject before the case suffix. *-mAk+IŋA* also forms causal clauses and, like the other converbs in this function, is discussed in section 4.635. Clauses in which *-mAk+IŋA* has temporal meaning all have a noun phrase referring to a stretch in time as subject of the verb; that appears to be what supplies the temporal content, which means that the basic meaning of *-mAkIŋA* must have been causal. Limiting ourself to Uygur we could therefore say that the basic meaning of the dative when added to verbal nominals is either causal or final, depending on whether the nominal itself is factive or not, and depending on the nature of the adjuncts within the subordinate clause.

-mAk in the ablative case, sometimes with possessive suffix before the case suffix referring to the subject, also forms causal clauses, discussed in section 4.635. Causal clauses can further have *-dOk+In*, which has the *-dOk* form in the instrumental case, as kernel.

Comparative clause converbs are formed from nominal forms of verbs by putting them in the equative case; their uses are discussed in section 4.632. In this function we find *+čA* added to the aorist form (already in Orkhon Turkic), to *-mIš* and, in Manichæan sources, to *-dOk+* with the possessive suffix.

The construction *-dOk+In üčün*, in which a postposition governs the *-dOk* form with possessive suffix referring to subject, the sequence *-mIš üčün* and the aorist with *üčün* are kernels of causal clauses and are therefore discussed in section 4.635. The quite rare sequence *-gAlI üčün* and the more common *-gAlIr üčün* and *-gU üčün*, on the other hand, forms final clauses, q.v. in section 4.636: The former are factive while these latter ones are not. Other nominal forms of verbs governed by

[519] Johanson 1995: 318 quotes *olor-dok+um+a* (by him spelled differently) as example for the phenomenon of personal converbs; this form is attested only once in the KT inscription where the dative may be governed by a verb signifying 'to rejoice (at)' (making the *-dOk* form an action noun and not a converb) and once in the BQ inscription in a damaged passage.

postpositions, *-mIš+tA* or *-dOk+dA* with *bärü*, *ken*, *ötrö* or *kesrä*, have temporal meaning.

Secondary converbs very often have their own subjects differing from those of the main clauses. These are generally expressed by nominals in the nominative case, as subjects in general are; subject nominals of secondary converbs can, however, also be in the genitive case because the kernels of such converb phrases are perfect participles which, as nouns can govern the genitive case.

In general, the syntax of converbs and converb phrases is described in section 4.63 and its subsections.

3.287 The conditional

The conditional suffix *-sAr* has by some (e.g. Johanson 1995: 340, note 13) been said to come from the aorist of *sa-* 'to reckon'; the aorist *sa-r* is actually attested in the DLT. It would be possible from the semantic point of view that *sa-r* should have been added to the vowel converbs of lexical verbs for (at first) asyndetic subordination, but there is no actual evidence to speak for this hypothesis: not a single trace for a putative converb vowel before the *-s°* within any attested form of *-sAr*.[520]

-sAr appears to have been pronounced as *-sA* already in some varieties of Uygur, on the evidence of medical and astrological texts, the collection of proverbs in the latter part of HamTouHou 16 or the rather early catechism in Tibetan script. In the Brāhmī mss. of TT VIII, on the other hand, we have more than 20 *-sAr* as against only three *-sA*,[521] which shows that the /r/ was quite real there. We consistently find *-sA* in Qarakhanid. The negative counterpart of this suffix has the shape *-mAsA(r)*. The form *är-sär* serves as conditional conjunction added to full-fledged verb forms (e.g. *uzun yašadï ärsär* 'if he should have lived for a long time' in M III nr.5 r 10-11 with a finite verb or in *üd ärtürürlär ärsär* with a verb in the plural), to *bar* 'there is' and so forth.

In the runiform inscriptions the conditional is a converb in that it is not directly linked with the expression of person; it usually (but not always) joins personal pronouns in the 1st and 2nd persons when these

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[520] The aorist being a participle, the idea would be corroborated by the converbial use to which *ärkli* and *ärkän* have been put, on the asumption that these are old *-(X)glI* and *-gAn* participles respectively. This assumption is, however, vehemently opposed by Johanson, presumably because he does not believe in the possibility of a neutralisation between the phonemes /g/ and /k/ after /r/.

[521] Two appear in text A; an additional one in TT VIII N 1 was reconstituted in the reedition of that text in Mātṛ.

are subjects. When the *-sAr* form *is* accompanied by subject pronouns, they follow it and are presumably clitic, e.g.: *tïnlaglarnïŋ ädgü törölärïŋä tïdïg ada kïlmïš ärsär män, ...* 'If I have set up hindrances to the good habits of people' (MaitrH XV 1 v 13). Such subject pronouns turn up also if they are present in the main clause as well, e.g. *ol altun tagka tägsär siz, kök lenxwa körgäy siz* (KP 28,1-2) 'If (or: When) you get to that golden mountain you will see blue lotuses'. This was not, apparently, obligatory in verse quoted in DLT fol.201, where it suited the metre: *apaŋ kolsa udu barïp / tutar ärdim süsin tarïp* 'Had (I) wished I would have followed him, taken him and dispersed his troops'.[522]

At a rather early stage, though not in the runiform inscriptions, the 3rd person plural of the conditional was expressed by adding the nominal plural suffix onto it; e.g. *mini täg tümän tïnlïgkyalar bolsarlar, ...* (PañcFrag II 53) 'If there were 10,000 poor creatures like me ...', which also shows that the form appears also with an explicitly plural subject. This suffix can be shared by adjacent forms, e.g. *muntakï yörügčä bïšrunsar yorïsarlar, ...* (BT I A_2 15-16) 'if they live according to this interpretation'.

är-sär is linked to participles to give analytical forms; instances are listed in the UW entry for *är-* 'to be': with the aorist 401b (§17e), with the preterite 402 (§18d), with *-mIš* and *-madOk* 403b (§19e) and 404a (§21c) respectively, with *-dAčI* 404b (§22d), with *-gAy* 405b (§23b). The main use of the *-sAr* form is conditional or concessive as described in section 4.64; this covers such meanings as 'if; in case', factive 'since; seeing that' and concessive 'although'. In many other cases, the suffix has purely temporal meaning, for which see section 4.633. There is no overt means for determining which is the appropriate meaning in any particular instance, but the form is generally to be understood as temporal if it refers to the past. The use of *-sAr* forms with correlating indefinite and demonstrative pronouns to give a use which comes close to relativisation is dealt with in section 4.65. *är-sär* with non-correlating indefinite pronoun is discussed in section 3.134. In section 4.612 we meet *-sAr* forms in relative clauses introduced by the particle *kim*, whose main clause contains the element *yok* 'there isn't'. In section 3.27 we quote an example where *kim* 'who' appears with a *-sAr* form in a main clause with what appears to be dubitative meaning.

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[522] A later hand added a *mīm* under the line, changing the form to *kolsam*. From here it got into Atalay's edition (who 'reproduces' the verse with the *mīm in* the line) and into Hacıeminoğlu 1996: 188. The widely used correct Qarakhanid form for this is *-sA män*, also proving the lateness of the addition.

Some scholars from Thomsen 1916 to Doerfer 1993 have thought that there also was a conditional suffix *'-čA'*, which Tekin 1968: 186 takes to be a gerund suffix. I have proposed in the previous section that the Orkhon Turkic words which can be read in this way be interpreted as vowel converb + equative suffix *+čA*, as a precursor to the vowel converb + *birlä* construction, with which it is synonymous. There is no need to posit obscure suffixes if the data can be interpreted successfully by existing morphology.

3.29. The copula

The verb *är-* 'to be' is a fully conjugated regular copula; e.g. *bay bar ärtim* 'I was well to do' or *sunčuklar yadïglïg töltäglig ärip ...* (BuddhUig 352-4) 'the mats are spread out and ...'. UW 391b-409a offers an exhaustive documentation of this verb's uses in (non-runiform) Uygur. A variant *er-* is found e.g. in HamTouHou 18,2 and 6. Forms of *är-* may have been unstressed, like e.g. the forms of *i-* in Turkish; one indication for this is the contraction with *nä* in *n(ä)rgäy* (YE 41,8, runiform script), where the interrogative pronoun is sure to have borne full stress. Its positive aorist *ärür* is rather rare in the inscriptions, appearing once to refer to the future and in two other instances in a set phrase. In Uygur, positive sentences with non-verbal predicates unmarked for tense, aspect or mood often have *ärür* (e.g. *bo mäniŋ äŋ kenki ažunum ärür* 'This is my last existence'), but sentences without verbal copula are also well attested; cf. section 4.31. *är-* is used in various analytical verb phrases; forms coming (or presumably coming) from *är-* as *ärki, ärinč* and *ärsär* have become particles while *ärü ärü* is used adverbially. *ärmiš* is added to sentences to express indirectivity.

bol- 'to become' is also a copula of sorts; it implies that the subject undergoes a change or a transformation in the course of, or related to the event being referred to; e.g. *xagan bol-* 'to become a ruler', *kul bol-* 'to become a slave', *yagï bol-* 'to start hostilities', *yok bol-* 'to perish' and the like. *añ(ï)g ögrünčülüg boltum* (M I 6,18) signifies (in its context) 'It has been a great pleasure': If one has 'become' something in the past, one still feels the results; in this sense, *bol-* can, in the constative preterite, convey post-terminal states. *bol-* can also signify 'to ripen or to grow': *bo tuturkan yalŋuz [magad] eltä ök bolur, aďïn [oron]ta bolmaz* (Ht III 488-9) 'This rice grows only in the country of [Magadha], it does not grow in any other (place)'. Kāšġarī knows this meaning and it is attested to this day beside the less lexical one.

'Becoming' is a content belonging to actionality: Sequences of lexical verb plus + *bol-* are described in section 3.251. When *bol-* follows *-mIš* participles, however, the phrase has a resultative content which is aspectual; see section 3.26. *-gAlI bol-* expresses ability, a category discussed in section 3.253. One difference between *är-* and *bol-* and other auxiliaries like *kal-*, *tur-*, *yorï-* or *bar-* is that the others are used as auxiliaries only when combined with lexical verbs, whereas *är-* and *bol-* have just been shown to be in use by themselves as well. Moreover, the lexical meaning of those other verbs is sometimes quite different from their meaning as auxiliaries, which is not the case with *är-* and *bol-*. Thirdly, other actionality auxiliaries are linked with converbs and not participles, whereas the verb forms with which *bol-* can be linked are participles and verbal nouns such as *-dAčI*, *-gAn*, *-(X)gčI* or the aorist.

There is a dream recounting mode characterised by verb phrases consisting of the aorist plus *bolur*, e.g.: *tüšämiš tüllä{r}in*[523] *öp sakïn[ïp ïnča] tep teyür: altunlug oronluk yerdä tüšär bolur. äv kutï waxšiki ünüp barïr bolur. bašïmtakï etiglig tokïrïm yuplunup yerdä tüšär bolur. agzïmtakï üstün altïn tišlärim tüšär bolur. ätözümtäki tonum etigim yokadur bolur* (MaitrH XIII 4r4-9) 'She remembers the dreams she dreamt and says the following: The golden throne falls to the ground. The house spirit goes away. The adorned bun on my head disintegrates and falls to the ground. The upper and lower teeth in my mouth fall off. The dresses and adornments on my body disappear'. Other dreams are characterised in the same manner in lines 5 r1-4, 5-8 and 9-12 of the passage. Similarly in a dream of Xuanzang: *ät'özin ketärü täzgürür bolur. näčä täzgürsär ymä ol kišil[är] amru yakïn kälip "yarlïkazun ayagka tägimlig" tep teyür bolur. montag tüšäyü yatur ärkän ...* (Ht X 549-50) signifies 'He becomes reticent; the more he does so, (the more) those persons keep coming to him and saying "Will his honour deign to ...". While he was lying and dreaming in this way, ...'.

ol 'that' can stand for the agent with verbs which are neither in the 1st nor in the 2nd person. Sometimes, its only task seems to be the assertion of the nexus between subject and predicate; in that function it can truly be called a copula (as the 3rd person pronoun serves as copula in Hebrew and Arabic). It can, however, also denote existence. See section 4.3 and Tuguševa 1986 for details.

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[523] Here and in a few subsequent passages I use such brackets to mark part of a word which I consider to have been inadvertently omitted by the scribe.

While positive sentences with nominal predicate get either forms of *är-, bol-* etc., or *ol* or nothing at all to indicate the nexus between subject and predicate, negative sentences can have only verbal forms, *ärmäz* etc., to correspond to Turkish *değil* and the like. *ärmäz* is extensively documented in the UW entry for *är-* and in UW 445-6.[524] A couple of details are worth highlighting. An example for a double negative is *näŋ tutyaklanmaz ärmäz* (Abhi A 144a3) 'It absolutely has to be grasped'. Then there are tag question type constructions; here a rhetorical question addressed to the king who is the object of the verb: *elig bägig ölüm madar agzïntïn bultumuz ärmäz mü?* (U III 69,14) 'Haven't we gotten the king from (out of) the jaws of death?'.[525] *ärmäz* is used for negating verb forms also when a proposition is to be stated to be untrue; e.g.: *burun til ätöz ärklig alïr ärmäz ïraktakï atkangug* (Abhi B 77b13) 'It is not the case that the smelling, taste and tactile senses grasp phenomena at a distance'.

Also worth mentioning is the pro-verb-phrase function in elliptic clauses: In *män inčip utlï biltäči bolu täginür män; näŋ utlï bilmädäči ärmäz* (U II 41,14) 'I want to become a thankful person; by no means a thankless one', e.g., *ärmäz* in fact stands for a 1st person verb. In *birdämlig tanuklamakïg adïnlar ärmäz yanturu käntü özläri ök bulurlar* (Abhi A 36b3) 'The absolute evidence, in turn, they find only themselves; others do not' *ärmäz* stands for the plural content of **bulmazlar*. Similarly *anïŋ ičintä yänä visimpat bulmïšlar ärsär olar äšidgäli bolurlar; näŋ adïnlar ärmäz* (BT III 738) 'If there are among them such as have received ordination, they can hear it; others by no means'. There are further examples for this use in UW 406 (§28); in all these cases Turkish would have used *değil*.

bar 'there is' and *yok* 'there isn't' fill tasks belonging to the copula in some other languages (like English); they are dealt with in section 4.31. In the following examples *yok* is used for negating adjectives, where one would expect *ärmäz* instead: *ätözümtäki küčüm taŋ adïnčïg yok* (PañcFrag II 49) 'The strength in my body is not admirable'; *birök tapïg udug yevigläri anuk bar ärsär a[nï] üzä tapïg udug tutguluk ol;*

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[524] *ärmäz* is here made into an entry; the motive for doing this seems, however, to come from German: I do not find any lexicalization in the examples quoted. Nor do I find any of the instances quoted in § b to have the meaning "-los", one of the meanings proposed in that paragraph.

[525] Some more such instances are mentioned in UW 401-2 (§18a of the entry). The sentence I have quoted appears there as "*bultumuz ärmäz mü biz*", but *biz* in fact belongs to the beginning of the next sentence: The speakers in that passage, trying to convince the king not to go to a certain place, are proposing to him to go there *themselves* instead.

birök tapïg [udug yev]igläri anuk yok ärsär (Abitaki quoted in UW 159-160) 'In case their offerings are ready, offering is to be presented therewith; if their offerings are not ready, ...'. In the last example *anuk yok* is opposed to *anuk bar*, as if *anuk bar* were more assertive than *anuk* by itself.

yorï- comes close to copular use when it is used in the meaning 'to live': This is attested several times in the IrqB, e.g. *otsuz suvsuz kaltï uyïn, näčük yorïyïn?* (45) 'In what way should I manage without grass and water? How should I live?'; *ölümtä ozupan ögirä sävinü yorïr* (49) 'Having been saved from death it happily goes on with its life'. Also e.g. ... *yorïkïnča yorï-* 'to live a life of (righteousness, etc.) in Ht VIII 83. The sentence *ud ätözlüg, koyn ätözlüg, kiši bašlïg yorïyur biz* (MaitrH XX 13v5) is uttered by creatures in hell who have human heads but bodies of animals; it can best be translated as 'We exist with bovine bodies etc.' or, more idiomatically, 'have bovine bodies (or) sheep's bodies (but) human heads'.

te-t-ir, the reversive aorist of *te-* 'to say', does not always signify 'is called' or 'is said to be': In didactic texts or passages, where it is common, its meaning often comes very near to that of the copula, implying doctrinal identity between two notions. E.g. *bo tetir kertgünčniŋ on törlüg yörügi* (TT VB 128) 'These are (considered to be) the ten meanings of faith'.

Another form sometimes appearing in near-copular use is *turur*, the aorist of *tur-* 'to stand': e.g. *bo taš ärtiŋü agïr turur* (U I 8; Magier, a Christian text) 'This stone is exceedingly heavy'; *mini birlä bir ugušlug turur sän* (TT X 472) 'You are of the same clan[526] as me'; *biz su körmišdakičä äs(ä)n tükäl turur biz* 'We are as well as one who has seen happiness' (UigBrief C6, a letter). The same letter (C11) has the clause *kälmäyin anta ok tursar sän* 'if you do not come but stay right there'. This is not an instance of *tur-* used as copula but it shows the probable semantic source of that use. Kāšġarī expressly refers to the copular use of *turur* as such, giving the sentences *ol taš turur* 'That is a stone' and *ol kuš turur* 'That is a bird' as examples; he says that this aorist has no past form and no infinitive and signifies 'he'. Arabic *huwa* and Old Turkic *ol* do, in fact, serve as copula. The DLT and the QB have further examples with *turur* as copula.

turur can sometimes express existence, e.g.: *okïsar män ol bitig ičintä ol künki biziŋ ašda ölürgüči ud koyn toŋuz bašlap tünlïglarnïŋ savï turur* (Suv 6,13) 'When I read it, *there were* in that writing the words of

[526] The adjective-forming suffix *+lXg* added to *bir uguš* 'one clan'.

creatures, mainly bovines, sheep and pork, which we had intended to slaughter that day at our meal'; *kamag sansar ortosïnta sab atlïg üč mïŋ ulug mïŋ yertinčü yer suvlar tururlar. ol üč mïŋ ulug mïŋ yer suvlar otrasïnta čambudvip uluš turur. čambudvip uluš otra yerintä matyadeš uluš turur. matyadeš uluš otrasïnta ketumadi balïk ärür* (MaitrH X 4r11-16) 'In the middle of the whole of *saṃsāra there are* 3000 great thousand-worlds called 'earth'. In the middle of those 3000 great thousand-worlds *there is* the country called *jambudvīpa*. In the middle of the country of *jambudvīpa there is* the country Madhyadeśa. In the middle of the country Madhyadeśa lies the city of Ketumatī.' The passage explains why the speaker wants to go to Ketumatī, the name of which was mentioned earlier. This explains why the first three sentences end in *turur* while the last one has *ärür*.

In *isig öz alïmčïlarï birlä turušur osoglug turur* (Suv 18,13) 'It seems as if he is struggling with his angels of death' the struggle is described as going on at the time of speech. This last instance appears to come from the use of *tur-* to express actionality (see section 3.251).

3.3. *Adjuncts*

The term 'adjunct' is in fact a syntactic one, not one referring to a class of lexemes. Adjunct phrases and adjunct clauses are adjuncts, as are e.g. nouns in the equative, the instrumental or the similative case. This section will not deal with all these, however, but with lexemes which are adjuncts by themselves and not by virtue of a case suffix. Lexical adjuncts and interjections have neither the nominal categories of number, possession etc., nor the verbal categories, and are hard to define by morphological shape. Adjuncts do not refer to entities, nor do they qualify heads serving for such reference; they are not normally used within noun phrases (postpositions govern noun phrases but are not within them).

It does happen that adjuncts get case suffixes, as *azu+ča* 'on the other hand, otherwise' etc. with the equative or *öŋi+n* 'separately', *birök+in* 'however' and *birlä+n* 'together' with the instrumental. The equative and the instrumental are, however, the foremost adverbial cases in Old Turkic, and here just come to underline the adjunct status of the elements: The meanings of the quoted elements hardly differ from those of their bases, *azu*, *öŋi, birök* and *birlä*. The instrumental case suffix, one of whose functions it is to turn nominals into adjuncts, appears to have been added also to form one or perhaps two contextual converb

suffixes: *-mAtIn* from *-mAtI* and perhaps *-(X)pAn* from **-(X)pA* (which might be the source of *-(X)p*).

Old Turkic converbs, which are verbs converted to adjunct status, can also be governed by postpositions: There is *-U birlä* in which the vowel converb is governed by the postposition *birlä* 'together with', e.g., and *-gAlI üčün* with *üčün* 'for', where the meaning of the final converb suffix and postposition support each other mutually.

ančïp / *ïnčïp* and *ančagïnča* are formed in hybrid manner from the demonstratives *an+ča* and *ïn+ča,* similar to Turkmen *šeydip* 'having done that, thereupon'. No verbal stem as intermediate base has to be assumed to have existed to explain these: *ančа* and *ïnča* are adjuncts as it is, and these are made a bit more specific by expansion with *-(X)p* and *-gInčA* respectively; in principle this is not very different from the hybrid forms mentioned in the previous paragraphs. The forms are discussed in section 3.132 because of their stems; see also section 3.33 for *ančïp* and *ïnčïp*.

Suffixless nominal stems can also take on adverbial tasks: The stem forms of most nominals denoting space or time are found in adjunct use; e.g., in *tün udïmatï küntüz olormatï ... esig küčüg bertim ök* 'Not sleeping *by night*, not resting *during the day* ... I offered my services' (Tuñ II E1-2), *tün* is a noun in the stem form while *küntüz* must be derived from *kün* 'sun, day' by an obsolete case suffix (preserved, among other places, in the composite suffix *+dXrtI*). Any adjectives are, *in principle*, candidates for adjunct use, their meaning permitting: What is translated as 'by' in the translation of *taloyka kičig tägmädim* (KT S3, BK S3) 'I missed the see by a little bit' remains unexpressed in Old Turkic. In KČ E8, another runiform inscription, the same content is expressed by the instrumental form *kičigin*. The adjective / adverb distinction appears to be quite fuzzy.

Adjuncts can be repeated iconically, e.g. *kat+ïn kat+ïn* 'repeatedly' in Ht VIII 21.

Particles are here distinguished from the other adjuncts mainly by their prosodic and word-order dependence on the linguistic units which are in their scope. Postpositions and relational nouns differ from other adjuncts in that they govern noun phrases (in particular case forms). Conjunctions do not have single linguistic units in their scope but link phrases, clauses or sentences to each other in various ways. Passage between the various adjunct types is fluid in Old Turkic, words being often used in various tasks.

By function, the distinction between sentence particles and conjunctions on the one hand and adverbs as described below is not

always clear, but nevertheless needs to be made: *ärki* and *ärinč* are listed as particles, e.g., because they have the sentence as a whole in their scope (without linking it to something). Another distinction to be used as criterion is that adverbs have relatively much, particles and conjunctions little lexical content.

Postpositions not governing noun phrases are adverbs, e.g. *üzä* or *öŋi*; or *birlä* 'together' in sentences such as *biz ymä kamag ka kadaš Ketumati käntdä birlä enälim* 'We, all the family and friends, want to descend into the city of Ketumatī together' or *birlä yana törčimäksiz ... yokadzun* 'May (the sins) disappear … together and without reappearing' (BT XIII 13,128); there is another such example in Ht III 798. In *näčük ol birlä [to]o waŋ vudi atlïg xanlar* (Ht VII 128) 'How (does he compare) with the kings Tang-wang and Wu-di?' *birlä* even follows a pronoun in the nominative case. *ikilä, yana* and *yičä*, all signifying 'again', are adverbs, but *yana* (which also appears as *yänä* or *yinä*) also serves as connective particle. *udu* in *udu käliŋ* (ŠU E2) 'Follow me!' or *kamag dentarlar udu atlantïlar* (TT II,1 63) 'All the electi got on their horses after him' is also an adverb; a runiform instance of *udu* is, however, described below as conjunction. In *azkya öŋrä yorïyu turzunlar; män una basa yetdim* (Suv 615,14) 'Please walk on a bit; I will have reached you in a moment!' *basa* serves as adverb with roughly the same meaning as *udu*. Originally no doubt the petrified converb of *bas-* 'to press upon something, attack, come up suddenly', we find it to be used as a postposition in the common phrases *anda basa* 'after that' (see examples in UW 145-6) and *munda basa* 'after this' or *ärtmištä basa* (BT II 1330). It then gets nominalised in *basa+sïn+da*, e.g. in such phrases as *basasïnda bar-* or *yorï-* 'to walk after him' (TT X 142-3 and U IV A 141-2 respectively).[527] In *az ïnaru barm[ïš], bir ögü[r] muygak kör[miš]* (M I 35,7) 'He went a bit further and saw ...' we find *ïnaru* adverbially qualifying the verb *bar-*; its use is here local, whereas the postposition *ïnaru* governing the locative has temporal meaning. *ara* and *utru* are further elements serving both as postpositions or adverbs and as relational nouns.

ötrö is a postposition governing the locative and signifying 'after'; it also has a conjunctional use signifying 'thereupon, then', as in the sentence *... tep sakïnmïš k(ä)rgäk. ötrö ät'öz küzädgü tamga tutmïš k(ä)rgäk* (TT V A 53) 'One must think "…", then hold a *mudrā* to guard the body'. Sometimes, e.g. in TT X 33, where it actually starts a story, *ötrö* is an element like the English particle 'now'. Postpositions

[527] *basa basa* has been lexicalised with the meaning 'repeatedly'.

can govern anaphoric zero objects, in which case no explicit objects appear; it would be wrong to classify a use such as the one quoted as "elliptic", as done by Gabain 1974 § 281: Old Turkic postpositions can serve as sentence adverbs, like conjuctions referring to the context. When – as in the TT X case – no reference to a zero-anaphoric is discernible, one might consider the two to be homophonous elements resulting from a functional split.

There are even clearer cases when the existence of homophonous adverbs and postpositions is only due to etymology: Take the postposition *ötgürü* 'because of', which presumably comes from *öt-gür-* 'to get through, to cause to penetrate'. The instance in *sansïz tümän ažunta bärü ötgürü bökünki künkä tägi* (TT VI 015) 'since countless myriads of lives, all the way through to the present day' must be a petrified converb of this verb,[528] but its meaning is still much closer to the verb than to the postposition. In *adïn kišikä ötgürü satsun* 'he may sell it on to a different person' (USp 13,11 etc., in civic documents) the best translation of *ötgürü* is simply the adverb (not the preposition!) 'on'; this, again, comes directly from the verb and has nothing to do with the postposition *ötgürü*. Similarly we have, beside the postposition *eyin* 'according to, in accordance with' the common sequence *eyin käzigčä* (e.g. in U III 10,10, 55,7, 67,2_3, 89,7) signifying something like 'in the appropriate order'.

A different domain of fuzziness is that between conjunctions and particles, as can be observed with *ymä*: This is, on the one hand, a clitic particle even breaking into noun and verb phrases; on the other hand it serves as a conjunction introducing sentences.

The distinction between various types of adjuncts is fluid also in the sense that elements often allow several interpretations letting them get classified one way or the other. Discussing the sentence *yagru kondokda kesrä añïg bilig anda öyür ärmiš* (KT S 5), Johanson 1988: 144-5 notes that *kesrä* could either be understood as a postpositive conjuction, as has been done hitherto, or as an adverb: Either 'after they had settled nearby, they seem to have thought evil thoughts there' or 'when settling nearby, they are reported to have afterwards thought evil thoughts there'; *kesrä* either as 'after' or as 'afterward'. I have already remarked on what seems to be the same ambiguity above, concerning *birlä* and *ötrö*; this should probably not be considered an ambiguity from the language's own point of view, however, but a merely partial distinction between adverb and postposition. That *kesrä* can also be

[528] Especially because its meaning is not causative: See OTWF 403 (with bibliography) and the discussion in that work of the various petrified converb forms.

considered a conjunction has to do with the fact that clause subordination *is*, in Old Turkic, often effected in a rather nominal way, making an element a postposition on the syntactic and a conjunction on the functional level.

3.31. Adverbs

Adverbs are lexemes which serve as adjuncts qualifying the verb phrase. They come from different sources: *+lA* sometimes forms local or temporal adverbs (e.g. *tün+lä* 'at night'; see OTWF 404-405), petrified vowel converbs serve as adverbs (thus e.g. *utru* in *bän utru yorïdïm* 'I marched forth'; see OTWF 741).

There is a formative *+tI* ~ *+dI* which forms adverbs from adjectives, as in *bo savïmïn ädgüti äšid, katïgdï tïŋla* 'hear my words well and listen to them carefully' (KT S 2) from *ädgü* 'good' and *katïg* 'hard'. Another lexeme formed with this suffix is *amtï* 'now', whose base lives on in South Siberian languages. There is an adverb *tï* 'firm(ly), constant(ly)' attested in Ht VII 1613[529] and *ädgü tï, üküš tï, ulug tï, katïg tï, tï yavlak* apparently are collocations involving this; see EDPT 432a for further instances. The formative may come from such a collocation. *nätägläti, kaltï* (both discussed in section 3.134) and *birtämläti* 'once and for all' are formed with the combination of *+lA* and *+tI*.

There are two other *+tI* elements whose meaning and use does not quite permit us to link them to the above: One is *ikinti* / *äkinti* 'second', the ordinal of *iki* / *äki*, which appears with an *+n* in *ikin ara* 'among (the two)'. Another *+tI* is added to an obsolete case suffix *+dXr* to form a group of local adverbs:[530] *üstürti* 'from above' documented in the phrase *üstürti kudï* 'downwards from on high' several times in the EDPT and attested also in Maitr 187r26, 197r8, 141 r17 and 75 v3 (*üstürti örtlüg yalïnlïg bï bïčgu ätözläri üzä yagar* 'From above fiery and flaming knives rain on their bodies'); *ičtirti* 'innerly' in TT V A 55 and 95 and ZiemeAra 77 and its antonym *taštïrtï* 'from outside' in M III nr.8 IV r12; *kedirti* 'from behind' and its antonym *öŋdürti* 'from before' in one passage in TT I 122 and 123 and *kedirti* also in Maitr 67r11.[531] *+dXn* nominals, *üstün*, *ičtin* and *taštïn*, *kedin* and *öŋdün*, come from the same local bases as these five. *yaŋïrtï* 'afresh, anew', attested

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[529] See Röhrborn's note to this for the Chinese equivalent.

[530] *+dXr* forms appear also with personal and demonstrative pronouns in *mintirdin* 'from me', *sindirtin* 'from you', *mundïrtïn* 'from here' and *andïrtïn* 'from there'.

[531] A secondary form *kendirti* has been read in Suv 10,9.

in OTWF 798, is probably not formed with this suffix but was a petrified converb from an unattested *+(A)r-* derivate from *yaŋï* 'new'. I take *tašïrtï* and *tašïrtïn*, attested in QB 3115, 5547, 5936 and 6259, to have been simplified from *taštïrtï* because of the three *t*s.

Time adverbs such as *temin* 'shortly before or afterwards' or *ašnu* 'before, earlier' (originally the vowel converb of *ašun-* 'to hurry') are a group by themselves, showing functional affinity to postpositions like *ötrö* when used absolutely to signify 'thereupon' (e.g. in Suv 194,16). *kačan* 'eventually, at some point in time', is of pronominal origin. This is an indefinite adverb, usually appearing with temporal clauses; some examples are quoted in section 3.134. In *kačan ol mogočlar bïďïlxïmka tägdilär ärsär ol yultuz täprämädin šük turďï* 'When those Magi eventually reached Bethlehem, ...' (U I 6, Magi, a Christian text) or in *kačan küsüši kanguča ärsär ...* (Suv 362,14) 'when, eventually, his wish reaches fulfillment …' it is used with the conditional form; in the following the verb is finite: *kačan vuu tayšï aya ïgačïn bultï, ötrö lovudi xan üskintä utru turup ... tokuz älig šlok sözlädi* (BT I A_1 9) 'At some stage V.T. found his beating board, then stood up in front of the emperor L. and … recited 49 *gāthās*'.

A particle such as *soka* / *suka* 'just' turns out to have aspectual uses as well (like English 'just, right when'); see OTWF 381 for some preliminary documentation.

It happens that adverbs are treated as nominals morphologically; from the temporal adverb *ašnu* 'earlier', e.g., we have the case forms *ašnu+ča* and *ašnu+ďïn bärü+ki* (further expansion, *+kI* governing the postpositional phrase). These and *ašnu+sïn+ta* are documented in the UW, whose author for this reason takes *ašnu* to have gotten nominalised. *öŋi+n* and *birlä+n* are postpositions with the instrumental case suffix, while the base of *azu+ča* is a conjunction. Cf. also *basa+sïn+ta, yügärü+dä* and *azu+sïn+ta*. this is not really a question of this or that lexeme getting 'hypostasiert', to use Röhrborn's term, but rather of the structural fuzziness around adjuncts in general, as discussed in the previous section.

3.32. Postpositions

Dealing with the Turkic languages, scholars have distinguished between 'proper' and 'improper' postpositions, which both govern noun phrases.[532] The 'proper' postpositions of Old Turkic (here simply called

[532] *üčün* is a postposition which governs what we have called clauses, functioning like a conjunction meaning 'because' or 'in order to'; cf. sections 4.635 and 4.636. Although

'postpositions') are not inflected as such, although many of them are inflected forms of nouns or of verbs. Elements serving as postpositions can, on the other hand, be inflected if they serve as adverbs or are used in some other function; thus the instrumental *öŋi+n* 'separately' or *aďïn öŋilärtä* 'in other separate ones (i.e. places)' (Suv 32,21). The 'improper' postpositions are, in fact, nouns from the morphological and the syntactic points of view, both diachronically and synchronically. Since they are not postpositions (and not themselves adjuncts) although they also serve as heads of postpositional adjunct phrases, we call them relational nouns.[533] Relational noun constructions are dealt with in section 4.22; see section 4.21 for details on the use and functioning of postpositions.

Some of the (proper) postpositions are opaque like *täg* (e.g. *yultuzlar täg* 'like the stars'). Others have a pronominal origin, like *bärü* 'hither' (e.g. in *antada bärü* 'since then'), which might be related to *bän* 'I' and *bo* 'this'. *ïnaru* 'forward, further' is both a postposition and an adverb. Its base lives on in the case forms *ïnča* 'thus' and *ïntïn* 'that side', in *ïnčïp* 'thus' and perhaps in the shorter allomorph of the 3rd person possessive suffix. *ïngaru*[534] in ŠU N10, the older variant of *ïnaru*, is clearly a directive of this pronoun. *sïŋar* 'in the direction of' appears to be identical with the noun signifying 'half' or 'one of a pair' and may possibly be the dative form of an obsolete pronoun of the shape **sï* (which may live on as the other allomorph of the 3rd person possessive suffix). *sïŋaru,* which Hesche 2001 makes likely to have been a synonymous postposition in Orkhon Turkic, may originally have been the directive form of this base.[535]

Still other postpositions come from nominals: *üzä* 'over; by (the use of), on the part of' is apparently related to *üstün* 'above'; alternately, it may come from a noun attested only in the Codex Comanicus (and possibly in Chuvash) with an obsolete variant of the dative case suffix (thus T. Tekin) or directive-locative *+rA* with subsequent zetacism. *birlä* '(together) with' comes from *bir* 'one' with the adverbial suffix *+lA*;[536] in later Old Turkic sources, *birlä* can lose its /r/ and/or be

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such units are clauses from the functional point of view and although they involve predication, they still also have all the categories, and hence also all the characteristics, of nominals. *üčün* therefore has the meaning of a conjuction but in fact governs these units exactly in the way and in the sense it governs other nominals.

533 Following Larry Clark's *Turkmen Grammar* (Wiesbaden: Harrassowitz) 1998.

534 Spelled thus and not as *ïŋaru*.

535 The apparent consistent frontness of the possessive suffix must have been secondary; note that monosyllabic nominal bases such as *ït* 'dog' also get fronted.

536 The function of this suffix is discussed in OTWF p.403-406. Tekin 1968: 110

expanded with the instrumental suffix to give *bi(r)län*. *öŋi+n* is another postposition expanded with the instrumental. The instrumental case suffix is no doubt to be found also in *ken* 'after', which is related to *kedin*, *kesrä*, *kerü, keč* and *kečä*.[537] In *balïk taštïn* 'outside the town', a *+DXn* derivate (called 'orientational' and discussed in section 3.12) governs a nominative as a postposition; further examples of *+dXn* forms, governing the ablative, are mentioned in section 3.12. *+rA* nominals such as *öŋrä* 'before', *kesrä* 'after' and *ičrä* 'inside' are also locally relational like *+dXn* forms and govern noun phrases in the locative or (*ičrä*) the nominative. *osoglug* 'like' is a *+lXg* derivate from *osog* 'manner' (normally, e.g. in U II 41,20, used in a binome with *yaŋ*, a Chinese loan). *yaŋlïg*, which comes from a base copied from Chinese, has a very similar meaning and structure. *täŋlig*, which is also formed with *+lXg*, is quantitative rather than qualitative. *yaŋlïg* survives as a postposition in Uzbek and Turkmen, *täŋlig* in Turkish (*deŋlü* > *denli*). Meaning, use and distribution show that these three are not mere instances of a complex *+lXg* construction but have fused and moved away from their bases.

Most postpositions were originally vowel converbs, e.g. *körö* 'with respect to', *ötgürü* 'because of', *tapa* 'towards' (e.g. inscriptional *čik tapa yorï-* 'to march against the Čik' < *tap-* 'to find'), *ašru, togru* (e.g. inscriptional *kün togru süŋüšdüm* 'I fought throughout the day', < *togur-* 'to cross'), *utru* 'facing', *tägi* 'till'. *tuta* < *tut-* 'to hold' attested as postposition in Abhi, signifies 'concerning'. *tägrä* 'around' is by Gabain 1974 § 286 thought to come from a converb of *täg-ür-* 'to convey', but the vowel converb of this stem is /U/ and not /A/ and the meanings of the two are too far apart; the EDPT is probably right in assuming the existence of another verb **tägir-*, which must also have served as base for *tägirmi* 'round' and *tägirmän* 'mill'. Some conjunctions (e.g. *yana / yänä* 'again; moreover etc.' from *yan-* 'to

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thought that *birlä* was an *-A* converb from a denominal verb in *'+l-'* derived from *bir*, but there is no such denominal formative in Old Turkic. Gabain 1974: 136's proposal of an *-A* converb from **bir+i-l-* is not possible either, as the converb vowel of *-(X)l-* is not /A/ but /U/. The idea, in Gabain 1974 par. 295, that *bi(r)län* comes from an *-n* converb of a denominal verb *'bir+lä-'* is also unacceptable, as no such verb is known, and as *bir+lä* and *bilän* etc. are clearly variants of one and the same postposition.

[537] Attempted etymological explanations for *üčün* 'for; because of' have assumed an instrumental form, generally from *uč* 'tip, extremity'; *uč* is, in fact, used in some such function in Ottoman. Within such an hypothesis, the only way to account for the front vowels would be to take *uč+ï+n* with the possessive suffix before the instrumental to be the source. The possessive suffix may have been fronted also when added to back-harmony bases; one would assume it to have caused the fronting of the first syllable when the form got fused. Backward fronting is found e.g. in *bökün* 'today' as well.

return'), adjectives and adverbs (e.g. *ašnu* 'before' < *ašun-* 'to hurry') are lexicalised vowel converbs as well.

kudï 'down' (e.g. *säläŋä kudï yorïpan* 'marching down the S. river' BQ E37) comes from *kud-* 'to pour', liquids always moving downward. The form is not that of a converb, however, as that would be *kuda*; rather, it belongs, like *töni* and *yarašï*, to the formation in *-I*, discussed in OTWF 340-344. *kudï* is attested with /u/ in Brāhmī script, survives with /u/ in Uzbek, Tuvan and Tofa and in ETŞ 9,23 alliterates with seven other instances of *ku°*. The postposition *tön-i* 'during', discovered by Zieme 1992, is clearly formed in the same manner, as is *yaraš-ï* 'suitable for': The vowel converbs from these stems end in *-A* and *-U* respectively.

adïn 'different', which *can* function as a postposition, probably comes from the base of *adïr-* 'to separate' with the formative *-(X)n* discussed in the OTWF. *eyin* 'according to' could come from *ey-* 'to pursue' with the same formative or it could be a petrified shortened *-(X)yXn* converb.[538] *artok* 'more' < *art-* 'to increase (intr.)', with a formative *-(O)k* dealt with in the OTWF, also serves as a postposition (cf. UW).

The border between converbs (of transitive verbs) and such among them that have become postpositions is not always clear; the problem for the linguist is that both govern noun phrases: Gabain 1974 § 273 and 278 and Tekin 1968: 163, e.g., consider *aša* and *käčä* to be postpositions signifying, respectively, 'beyond' and 'beyond, across'. The sentences which they quote, e.g. *kögmän aša kïrkïz yeriŋä tägi s[ülädimiz]* (BQ E 15) 'We crossed the Sayan and campaigned all the way to the land of the Kïrkïz' and *käm käčä čik tapa sülädim* (BQ E 26) 'we crossed the Yenisey and campaigned against the Čik,' give the

[538] Gabain 1974 has *iyin* in §296 and *iyä* in §277, deriving both from the same verb *iy-* translated as "folgen" in the former paragraph and "folgen, verfolgen, bedrängen" in the latter. In §277 she also includes the phrase *iyä basa* which she translates as "ständig". The two readings both represent *eyin*, with implicit vowel in the instances quoted as *iyä*, *alef* and *nūn* looking identical in the texts in question. In the TT VI instance quoted, *'iyä'* is found only in one ms. while another writes 'YYYN, and in the U III instance 'YYYN is added under the line. *eyin* is found spelled 9 times with *e* in Brāhmī texts and in no case in any other way, and onset *e* is never used in those texts to represent any other vowel in word onset. I now no longer think that the first verb in the biverb *ey-bas-* is to be read as *ïy-*, as against OTWF 602-3: The Tekin proposal for reading Tes E5 is in any case too uncertain to make the difference. In 'Bemerkungen zum lexikalischen Sondergut des Uigurischen', an unpublished lecture held at the Frankfurt VATEC symposium (September 2002), K. Röhrborn expressed the view that *eyin* / *iyin* comes from a misreading of *ävin* 'grain; single hair' by being part of a loan translation of a Sanskrit expression; this seems unlikely to me, for reasons which cannot be detailed here.

impression that they are converbs and not postpositions. The examples with *aš-a* and *tog-a* refer to the crossing of mountain chains, those with *käč-ä* to the crossing of rivers. Such words can be called postpositions if they are lexicalised in a meaning in any way distinct from that of the verb (e.g. *tap-* 'to find' vs. the postposition *tapa* 'towards') and if they are also attested in a way which does not call for a subject. With *öŋi* 'separate or distinct from', there is a functional ambiguity as to postpositional or adverbial function discussed in section 4.2 below.[539]

The common postposition *sayu*, presumably a petrified converb form from the obsolete verb *sa-* 'to denumerate, enumerate, recount', serves as a peculiar amalgam of 'all' with locativity; it signifies 'to all, in all, at all places': *uluš sayu balïk sayu kim bäglärі ... ärsär* (TT VI 9) 'In all states, in all cities, … whoever are their rulers, …'. It is still in use in languages so remote from each other as Yakut (*ayï*) and Krymchak and finds its analogue in Mongolian *büri*. Like the other postpositions governing the nominative, *sayu* as well governs the accusative of possessive suffixes; e.g. *ay täŋri künin sayu* 'on every day of the Moon God (Xw 301).

tägimlig 'worthy of ...' is derived with the formative *-(X)mlXg* dealt with in OTWF section 3.322. Beside the common *ayagka tägimlig* 'venerable', instances such as *alkïška tägimlig* 'praiseworthy', *iki didimka tägimlig*, 'worthy of the two crowns', *mïŋ ögmäkkä tägimlig* 'worth a thousand praises' quoted in OTWF show that Uygur had created a postposition of this form, governing the dative.

In Orkhon Turkic the noun *yan* 'side' became a postposition signifying 'on the side of'; in addition, it follows synharmonism.[540] We find it in *kan+ta yan* 'from those around the khan' (Tuñ 33), *bir+dın yän* 'on the southern side', *öŋ+dün yän* 'on the eastern side' and *yïr+dïn+ta yan* 'from the northern side' (Tuñ 11) and *täŋrikän yän* 'beside his majesty' (Ongin F5). *yAn* shares the feature of adhering to synharmonism with the postposition *täg* 'like'. In *kan+ta yan* and *yïr+dïn+ta yan* in Tuñ, the two Orkhon Turkic instances of *yAn* where it follows vowels, these vowels are not actually explicit, which would be

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[539] There does not appear to be any grammatical or functional ambiguity concerning *alku* 'all', mentioned as a postposition in Gabain 1974 § 272: As shown in its UW entry and elsewhere, it is always an adjective (sometimes used adverbially, like many adjectives) and never a postposition; it seems more likely to have come from a contraction of the verbal nominal **alk-gu* than from a vowel converb (as stated in the UW), because the converb vowel of *alk-* is /A/.

[540] *bağan* 'to me' *sağan* 'to you' in Anatolian dialects and in Kazakh may possibly be contractions of the normal datives *baŋa* and *saŋa* with this element; I know of no other explanation for these forms.

the normal spelling of vowels at the end of words (and often indeed at the end of stems); nor is there any punctuation mark before *yan*. From this it follows that the scribe actually felt *yAn* to be a suffix. We cannot go so far, as this element actually follows the locative case suffix and as this would be the only instance where the locative form of a noun would be followed by another case suffix; but synharmonism does bring *yAn* quite some way into that direction.

In the inscriptional pronoun sequences *antag* 'like that' (related to *ol* 'that') and *montag* 'like this' (related to *bo* 'this'), *täg* also follows the harmony of the base. Note that the base of these two forms is the oblique stem and not the accusative form, which otherwise serves as pronominal base for postpositions governing the nominative of simple nouns. The same clearly happened to *nätäg*, which is spelled as one word though otherwise identical to *nä täg*, and gets expanded to give adverbial *nätäg+in* and *nätäg+läti* (cf. section 3.31). In the Orkhon inscriptions, *antag* still alternates with *antäg*. *sizintäg* 'like you' in the archaic Manichæan ms. in ChristManManus (r10, clearly visible on the facs.) must be another example for this process, since *sizin+* is the oblique base while *sizni* is the accusative of this pronoun. In view of all this, *+tAg* can be said to have become a case suffix as far as pronouns are concerned. In *bintägi* 'someone like me' in Tuñ 57 (before Alyılmaz 2000: 110-111 erroneously read as '*büntägi*') the base is also the oblique stem. The possessive suffix at the end is demanded by the context: A *täg* phrase gets a possessive suffix also in *bars täg+im* 'my tiger-like one' in the runiform epitaph E28,1; possessive suffixes are not normally added to postpositional phrases.

3.33. Conjunctions

Conjunctions are elements joining clauses to their matrix sentences, linking sentences to their context, linking sentence parts or noun phrases to each other and the like. They normally precede the stretch which is in their scope, but *ärkän* and the collective numerals (see below) follow what they subordinate. Conjunctions generally do not govern the elements they are attached to, but subordinating conjunctions like *kim* can be considered to govern what they subordinate. The postposition *üčün* can also be considered a conjunction where, in its causal use, it often serves for subordinating clauses; cf. *tapïgčï kïrkïnlarï ägsük kärgäk üčün* (Maitr 120r23) 'because her serving maids were insufficient or lacking', with *üčün* subordinating the predication as a whole. Conjunctions do not demand

that what is in their scope should have any particular form. Many of the elements mentioned in this section are not conjunctions in the narrow sense, but all serve the task of in some way connecting. What follows is an unstructured and possibly incomplete list.

birök and *ymä* are mentioned among the connective-adversative particles (section 3.342) and not among the conjunctions as their presence does not bring about subordination or coordination but is optional in these juncture types; their function is to make the logical, semantic or rhetorical relationship between subordinating and subordinated clauses (more) explicit.

Let us, here, first mention a number of coordinating elements: *takï* functions as coordinating conjunction signifying 'and'. We translate *muntada adïn takï öŋi aš ičgü yok* (Suv 610,16) as 'There is no other or different food than this (i.e. than eating the prince)', but use 'or' only because English demands such translation under negation. What is linked in the previous example are two postpositions; in the following example two nominal clauses having the same predicate are linked: *ančama kutlug bo üd kolo ... takï kutlug bo yer oron kim ...* 'So happy is this time and so happy this place that ...' (MaitrH XV 6r5). In what follows the linkage takes place between full verbal sentences: *bir äkintikä karganurlar alkanurlar takï ... okïšurlar* (M I 9,11-14) 'They curse each other and shout at each other'; *amarï tünlïglar čaxrï äŋirär yüŋ äŋirär kentir äŋirär, böz batatu kars tokïyur, takï ymä adrok uzlar käntü käntü uz išin išläyür* (KP 2,5) 'Many people make wool or hemp thread, weave linen or woolen cloth and (in general) various professionals carry out each his special profession'. In some other cases (mentioned in the next section) *takï* must be considered a particle rather than a conjunction; while the two uses clearly have a common source (see OTWF 340 for an etymology which accords with both meanings), these should probably be considered different elements synchronically. *takï* is not attested in runiform inscriptions; it does appear twice in the (runiform) Irk Bitig.

yana was originally the vowel converb of *yan-* 'to return'; it appears with back harmony in Orkhon Turkic. Subsequently, in Uygur, it changed to *yänä* and *yenä*; *yänä ök*, e.g. in TT X 17, shows the new harmony class. It became an adverb signifying 'again' before it also developed a conjunctive function, then bearing the meaning 'moreover' (also in combinations such as *yenä ök* or *yenä ymä*).

azu 'or' appears already in Orkhon Turkic *azu bo savïmda igid bar gu?* (KT S 10) 'Or is there anything false in these my words?' In KöktüTurf TM 342 1 r 1-4, a runiform ms., there are two consecutive

sentences both starting with *azu*; in such cases the translation should be 'either ... or'. See the UW entry for Uygur documentation. *azu* cannot be the petrified converb of *az-* 'to stray', as stated in UW 324a, as that is *aza* (cf. UW 319a for Uygur evidence for this). *azuča* (also documented there) has a similar meaning and use as *azu* and no doubt comes from it. Cf. also *azusïnta* 'beside; on its side' (attested only in Ht) and the even rarer *azukï* 'secondary, subsidiary'.

ärmäsär, the negative conditional form of the copula, serves as an adversative conjunction with meanings such as 'otherwise' or 'however'; examples are given in UW 445a. In USp 24 we find *bol-ma-sa* with the same meaning and function.

In Uygur, *ap* practically always appears in pairs of stretches, where it signifies 'both ... and'; in longer chains its meaning can be given as 'as well as'. See the UW for this documentation; in many of the instances *ap* is followed by the particle *ymä*. The UW also quotes one sequence of two instances in U II 4,2 where, after a sentence with a negative verb, the two *ap*s signify 'neither ... nor'. In the UW the U II passage appears as the only example for this latter meaning, but we find it also in Wettkampf[541] 17-18: *bo tört savda adïn tusulmagay, ap alp ärdämäŋiz, ap özlük bašlïk atïŋïz* 'Nothing beside these three words will serve you, neither your bravery nor your high-bred race-winning horse'. *ap* is used also in Qarakhanid sources; there, however, all the instances are negative: The DLT has double *ap* signifying 'neither ... nor; in one QB and one Middle Turkic example, there is single *ap* following a negative verb and introducing a positive verb form, to be translated as 'nor'.

The source of runiform *ančïp*[542] and Uygur *ïnčïp* and the documentation for *ančïp* are discussed in section 3.132. The examples for *ančïp* all show it at the beginning of sentences but not of paragraphs, preceded by *-dI* or *-mIš* in the historical narrative of the inscriptions but by a nominal sentence in the epilogue of the IrqB. *ančïp* always signifies 'having done that; thereupon'. This is also the meaning of *ïnčïp* in the following passages: *ïnča sakïntïm ... mini ... dendar kïlgay siz tep. ïnčïp amtïkatägi mäniŋ köŋülüm näŋ ornanmaz* (TT II,1 40) 'I thought you would ... make me into an elect. As a result of that my heart has not calmed down till now'. TT II,1 is Manichæan;

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[541] Published after the appearance of the fascicle of the UW containing the entry for *ap*; the positive translation offered by the editors does not suit the context.

[542] In SP 32 (context fragmentary) the transliteration gives 'NCYP but should be corrected; the transcription correctly writes *'inčip'* (see facs.). By origin this word and *ančïp* appear to be pronoun – verb hybrids.

another Manichæan instance: In *tümkä ärdim ärsär ymä ïnčïp yana kamgak käntirkä tayaklïgïn köntülmiš täg boltum ärdi* (Ht VII 1974) 'Even though I was foolish, I had thereupon again become like the *kamgak* plant which gets upright by leaning upon hemp' the main clause of a concessive construction is introduced by *ïnčïp*. *amtï anï barča ökünür biz bilinür biz. ïnčïp tükäl bilgä täŋri täŋrisi burxan kaŋïmïznï körür biz, no[mïn äšidür] biz* (TT IVB 23) 'Now we repent and admit all that. As a result of this we now see our father the perfectly wise Buddha, king of kings, and [listen to his tea]ching'.

In M I 16,15 *ïnčïp* appears to signify 'similarly': *ančulayu kaltï uzlar ädsiz näŋ iš išläyü umaz, ïnčïp ärli uzuntonluglï näčäkätägi beš täŋri küčin yemäsär näŋ ätöz sävigin uvutsuz išig sürü umaz* 'Just as e.g. craftsmen can by no means carry out their craft without material, similarly men and women can by no means carry out the shameless activity by bodily love as long as they do not use the power of the fivefold god'. In TT I 79 *ïnčïp* appears to signify 'because': *busuš kadgu bälgüsi äŋirä turur; ïnčïp ädgü kïlïnčlïg ešlärkä ïnanmagïnča ...* 'The marks of sorrow haunt you; because, as long as you don't trust helpful friends [you will not get rid of] (anxiety)'. Sometimes *ïnčïp* signifies 'hereby' or 'in spite of this'; the EDPT (mentioning a number of additional examples) also gives the meanings 'this being so; so much for that; on the other hand; but' and 'then'.

The adverb *udu* 'following, after' has been derived from the verb *ud-* 'to follow', which did not survive in Old Turkic. In Tuñ 55 we find *udu* used as a conjunction: *elteriš xagan kazganmasar udu bän özüm kazganmasar ...* 'If king Elteriš kagan had not won and if I myself had not won (either), …'.

kaltï 'for instance' does not itself normally create comparison as it is practically always used together with elements doing that: the equative case or the postposition *täg*. With *täg* it appears e.g. in *kaltï yagï alkïnmïš yula täg* (Maitr 103v11) 'for instance like a beacon whose oil has been consumed', with an equative in *üč yavlak yolka tüšügli ančа ol kaltï bo yertäki tuprakča* (TT VI 337) 'those who fall into the three evil ways are (as numerous) as e.g. the soil in this earth'. In the last sentence *kaltï* correlates with *ančа*, in the following one with *ančulayu*: *saŋa utruntačï kišilär ančulayu bolur kaltï ... iši küdügi bütmäyök täg* (TT I 52) 'People who oppose you are, for instance, similar to somebody … whose business does not work out'. It appears with an aorist in the equative case in *kaltï ... kün täŋri ornïnta yarok ay täŋri yašïyu bälgürä yarlïkarča eligimiz ... bälgürä yarlïkadï* (U 57,7) 'our king graciously appeared ..., like, e.g., the bright moon's shining appearance instead of

the sun', with a demonstrative of manner in *ïnča kaltï täŋri yerintä ... tugmïšïn öyür sakïnur* 'he remembers, e.g., how he was born in the divine realm' (MaitrH XV 1v21). The following comparative sentence serves as a comparison to the one preceding it, whence twice *kaltï*: *kaltï ol kiši ätözin buluglï yalŋuklarta kertgünč köŋüllüg tïnlïglar anča ol kaltï tïrŋak üzäki tuprakča* 'as, e.g., among people who acquire a human body, creatures with faith are e.g. like soil on one's fingernail' (TT VI 338). Finally, *kaltï* introduces converbial clauses ending in *-(X)p* or *-sAr*, with the same meaning: *kaltï yürüŋ tašïg alsar* 'if, for instance, one takes the white stone' in BlattRun, a runiform ms., where the author dwells on one of the stones after mentioning it together with some others. In M III nr.4 r9–v18 the human body is compared to the ocean which is jostled and shaken by winds coming from all different directions; the element *kaltï* appears in this passage seven times, five times with *-sAr* clauses and twice with noun phrases. In one of these the meaning 'for instance' is still acceptable; in *ančula mäŋ(i)zlig ärürlär kaltï ulug tal'uy s(a)mutrï kim bulgak t[älgäki] üküš ol* (r16) 'They (i.e. all thoughts, feelings, forces etc.) look like the great sea *samudra*, whose whirling and jostling is great' however, there is neither *+čA* nor *täg* and *kaltï* should signify 'as'. *kaltï bo tört sav agzaŋïzda tutsar siz, ïnčïp ulug takda muŋda kurtulgay siz* (Wettkampf 21) 'Inasmuch as you mention these four words, to that degree will you be relieved of the great sadness and trouble' apparently shows *kaltï* and *ïnčïp* in an early correlative function, these two elements originally coming from interrogative *ka+* and demonstrative *ïn+* respectively. See section 3.134 concerning the etymology of *kaltï* and some other meanings it has.

The postposition *ötrö* is discussed in section 3.32; governing a zero anaphoric and thus serving as temporal adverb it comes to mean 'thereupon'. In an instance like the following, however, *ötrö* has become an introductory element (here translated as 'well'): *amtï bo savïg magat ulušta ... bilmiš ukmiš kärgäk. ötrö [..] atavakï yäk katïg ünin kïk[ïrïp] ... tïnlïglarïg ölürgäli ugradï* (TT X 33) 'Now this matter has to be imagined in the country of Magadha, ... Well, the demon Āṭavaka shouted with a loud voice, intending to kill ... living beings'.

kim is a subordinating conjunction placed before the clause it governs. In *ötündilär kim kälürmiš ärdilär üč törlüg közünč* 'They said they had brought three types of present' (U I 6,14, Magier) it introduces an utterance as an object of a verb of speaking (section 4.7). *kim* can introduce consecutive clauses (discussed in section 4.637), causal clauses (section 4.635) or final clauses (section 4.636). In the latter two the verb is in the conditional or in a volitional form, whereas

consecutive clauses have *kim* with indicative verb forms. *bo yer üzä näŋ andag t(ä)v kür yälvi arviš yok kim ol umasar* (M II 5,10) 'There is no such trick and magic in this world as he would not be capable of' is an example of *kim* used for the introduction of a relative clause (as described in section 4.612). The (Qarakhanid) QB also has relative clauses introduced by *kim*, with a finite verb or with the *-sA(r)* form.

apam 'in case' appears to have always been used with the conditional, mostly together with the particle *birök*; see the UW for documentation. Unlike English 'if', its presence is not a condition for conditional meaning. However, as stated in the EDPT entry, *-sAr* also has non-conditional uses and *apam* selects the conditional one. QB and DLT use *apaŋ* instead of *apam*. In case the Qarakhanid variant does not represent the original shape of this conjunction, its original meaning may have been 'now': I tend to follow Ramstedt (as mentioned in the UW entry) in believing it to be a derivate of **am* 'now'[543] with intensifying reduplication; the semantic process seems a likely one.

The postposed conjunctions *ärkli* (runiform inscriptions) and *ärkän* (the rest of Old Turkic) are discussed in section 4.633 and signify 'while (being)' or 'when (being)'; examples for *ärkän* are also listed and classified in UW 433-434: They turn sentences, normally having an aorist verb form or a noun phrase as predicate, into temporal adjuncts. The negative counterpart of positive aorist + *ärkän* is *-mAz ärkän* in Qarakhanid, *-mAzkAn* in Uygur. *ärkän+ki* is, however, made to govern negative aorists in two late texts, as documented in the UW entry for it. See OTWF 62 for possible etymologies for *-mAzkAn* (and cf. Bang 1915: 631-32), OTWF 383 for *ärkän* in general[544] and cf. section 4.633 below. It might, perhaps, be possible to take it to be syncopated from **ärür kän* (with the emphatic particle *kAn*); that would make it similar to *-mAzkAn*, *in case* this same explanation can be offered for that suffix (which see in section 4.633).

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[543] Living on in this meaning to this day in Sayan Turkic and probably eliminated everywhere else due to its phonic similarity with the noun signifying 'vulva'. (In Proto-Turkic this noun may have signified 'mouth' and not 'vulva', to judge by its Mongolic cognate.) Old Turkic *amtï* 'now' is no doubt formed from the same base with the adverb forming suffix *+tI*.

[544] Johanson 1994: 177 finds the view expressed therein unconvincing but has no alternative explanation. *ärkän* cannot be a converb of *är-* 'to be', as expressly stated in UW 433, as no converb suffix *-kän* is attested in any other word.

3.34. Particles

Particles are unbound elements of weak or no lexicality, which are not marks of grammatical categories either; they do not inflect but some come from inflected forms of other words. Particles are classifiable by scope and position. The term 'particle' is not defined by any syntactic task but by prosodic and/or word-order dependence of such elements on other words; particles can serve to connect, e.g., or fulfill other tasks. The border between 'particles' and what I have listed as 'conjunctions' is fuzzy, as elements such as *ymä* and *birök*, dealt with below (especially p.477), show both clitic and clause-starting behaviour.

The emphatic element *Ok,* the interrogative *mU* and the late *mat* or *mAt* are instances of postclitics. When such particles are joined to a phrase or clause consisting of more than one word, they can insert themselves within it after the first word, though their scope may be the whole phrase; e.g. *ol ok oron* in *maytri bodisavt ol ok oronta olorup ...* 'The *bodhisattva* Maitreya sat down in *that very place*'. In *kučmazlar mu ärdi?* (DKPAMPb 608) 'weren't they wont to embrace?' or *mini sävär mü siz* (KP 6,4-5) 'Do you love me?' such a particle introduces itself into a verb phrase, before the auxiliary in the first case, before a clitic pronoun in the second. Other particles, e.g. *čak* and *äŋ*, are proclitics. Clitic particles share the feature of phonetic dependence with affixes. What distinguishes them from affixes is that affixes are added to narrow sets of lexeme classes, whereas particles can generally be added to wide arrays of them; their scope covers whole words or even phrases. Unlike postpositions, particles do not govern their scope. They are here classified as emphatic, connective-adversative, epistemical and volitive.

3.341. Emphatic particles

The clitic particle *Ok* emphasizes the word it follows. It drops its vowel when added to some elements ending in vowels, e.g. *inčä+k* in v 2 of the runiform ms. edited in SEddTF I 542 and TT II,1 29, *ïnčak* (with dotted Q; Manichæan script) in M I 7,17*, ančak* and *antak* (the latter two quoted with numerous examples in the UW), *ölürtäčik* < *ölürtäči ök* in Tuñ 11, *ančulayuk* in LautBemerk 29 beside *ančulayu ok* on l.43 of the same text. The fact is that *ančа ok* and *anta ok* are also common, *ančа ok* even more than *ančak*. Uygur also has numerous instances where *Ok* regularly retains its vowel after bases ending in vowels, e.g. *bo ok, munta ok, saŋa ok, ymä ok, yänä ök, antakya ok, körmištä ök, yarlïkamïšta ok* and so forth. That non-elision is phonetically real is

shown by Brāhmī instances, *bo ok* (TT VIII H3), *anï ok* (TT VIII D18) and *inčgäkyä ök* (TT VIII F14). Note, though, that *ök* in *yänä ök* is, e.g. in TT X 17 and 358, spelled not ’WYK but ’WK, in the way in which rounded vowels are spelled in non-first syllables; i.e. the scribe at least partly felt the two units to ‘belong together’.

Ok can apparently be added to any part of speech, as the examples above show. An example such as *körmištä ök* ‘the moment he saw’ just quoted shows that it can be added to temporal expressions; another such instance is *bo nomka kertgünmägüči tïnlïg yorïyu turur ärkän ök ölüp bargaylar* (Tachi 28-9) ‘Creatures who do not believe in this teaching will suddenly die *right* in the middle of their life’.

In the Tuñ inscription there are four instances of a particle *kök*, presumably consisting of *(O)k Ok*: In all the instances it appears at the end of a sentence, after a finite verb form ending in a vowel (e.g. *ölürtäči kök* ‘he will really kill (us)’); it may therefore just be that it is in complementary distribution with *Ok*, a mere *k* after vowels presumably not being felt to be expressive enough.

čak is a preposed particle signifying ‘just, exactly, no other’: *kim ärti ärki ölürtäči – ögökkyäm – čak sini* (Suv 626,20) ‘Who might it have been, my darling, who singled you out for killing?’; there is a similar instance in BuddhKat 23. *čak amtï* (Suv 612,20) is ‘right now’. Another temporal instance of this particle is quoted in ZehnGeb p. 67 from MaitrH: *čak bo kolota ymä šakimuni ... sïgun ažunïnta tugdï ärti* ‘Right at this moment, now, Śākyamuni ... had been born as a deer’. DLT fol.167 says that *čak* is “a particle expressing the ... exact identity of a thing” and gives the examples *čak ol atnï tutïl* ‘Hold that very horse!’ and *čak amačnï urgïl* ‘Hit the target on the nose!’.

soka, for which more than a dozen examples are listed in OTWF 381, appears to have a similar meaning: Its Chinese equivalent signifying ‘geradewegs, genau, direkt’ is mentioned in the note to ZiemeLegenden p.152 l.8 (ms. filling a lacuna in Suv 8,1). Some of the instances have it together with *ugrayu*; in some others it is used for stating that something happens ‘right that very moment’: (*suka sözläyü turur ärkän* (AbitAnk 68) ‘right while speaking’. *soka* may come from *sok-* ‘to hit, beat’ (or from *suk-* ‘to thrust in’, in which case it would be *suka*). Unlike *čak* and *kAn* it is not added to time adverbs.

kAn is added to adverbial temporal expressions and appears to give them some meaning such as the one which ‘just’ has when qualifying ‘now’ or ‘then’. We find it with *amtï* ‘now’ and *ašnu* ‘before’ (examples for both in the UW), *ertä* ‘early in the morning’, *öŋrä* ‘before’ (cf. OTWF 62) and as *yaŋïrtu kan* (BuddhUig I 227) ‘recently’.

Then we have *anč(a)gïnča kan yarïn y(a)r'udï kün tugdï* (M I 6,19) 'In a short while[545] dawn broke and the sun rose'; *anč(a)gïnča* is a hybrid from *an+ča* with the temporal *-gInčA* converb meaning 'until' with perfective verbs, and clearly formed in analogy with that converb: *kAn* is attested with a regular *-gInčA* form in *tašïkgïnča kan* 'just until (you) get out' (fragment quoted in a n. to BT V 521; WilkKatMan nr. 143 v1). The temporal form in *-mAzkAn* dealt with in section 4.633 may also have been formed with this particle (though *-mAz* is not in temporal adverbial use as the words in the scope of *kAn* quoted in this section are). If one accepts this derivation in spite of the problem, one can not exclude that *ärkän* 'while' comes from **ärür kän* by syncopation and assimilation of the two /r/s.

The emphatic particle *mat* is added to personal (*sän* in the QB), demonstrative (*bolarnï* in ETŞ 12,6, *bo* 15,57, *andag* in the DLT) and interrogative (*nätäg* and *kim+i* in the QB) pronouns and to verb forms (three in *-gAlI*, three in *-dI* and once the future in *-gA* in the DLT). It is always spelled together with them and may have followed vowel harmony, as assumed by the editors. If it did, it should be related to the second syllable of *ävät ~ äwät ~ yämät* 'yes' (DLT). This may link it to *bat* 'quickly and for sure' (DLT fol.161, TT VII 28,28 and 37, H I 23, 39 and 43), which stands *before* the verb. Words of Turkic origin do not have onset /m/ except when the following consonant is a nasal, but another clitic starting with /m/ is *mU*. *mat* might, on the other hand, be related to Mongolic *mayad* (pronounced with [t]) 'certainly, really', attested from the Secret History on and in modern Mongolic languages (and borrowed into Turkic Karaim). The ultimate source appears to have been Sogdian, which has an element *m't* (with long *a*) 'thus'; this is exactly the meaning given to *mat* by Kāšġarī.[546]

A particle *čI* is in Suv 34g,22, BT VIII A 132 and 276 and BT XIII 3,29 in conditional clauses added to the particle *birök* with no noticeable difference in meaning or function; in Maue 1996 14,7, a Brāhmī source, *birökči* appears in fragmentary context.[547] In section 3.4

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[545] The translation is tentative and follows *anča* meaning 'a little bit'.

[546] For 'yes' cf. the semantic development of Latin *sic* > Romance *si*. *bat* must have been created at a stage when onset /m/ was unacceptable. One or two runiform instances of *bat* are not very clear. When Classical Mongol 'X' reflects the pronunciation [a:], as happens in some of the instances, it is pronounced as [a:] in Modern Mongolic languages, which is not the case with this word; modern usage may, however, be a case of spelling pronunciation, which also sometimes happens.

[547] Ottoman *eğerçi*, which is mentioned in the note to BT XIII 3,29, was borrowed from Persian and has concessive meaning in both of those languages (cf. Turkish *gerçi*). However, this opens the possibility that Uygur *či* was borrowed from some Iranian

we find that *čI* is also in Maitr added a number of times to presentative *muna*. In both cases *čI* is spelled together with the preceding element.[548]

äŋ 'most' is preposed to noun phrases, e.g. in *äŋ öŋrä* 'the foremost'; it is often spelled with two *alef*. See the UW entry concerning its uses in Uygur. It appears to have joined some words following it in closer juncture: *äŋ ür* 'lately, recently' with *äŋ ür+ün* and *äŋ ür+ki* are all spelled as single words, as quoted in UW 389a. Further cf. *äŋ mïntïn* 'even', which is often spelled as one word, documented in UW 388; note also that the very common *äŋ ilki* 'the very first' is already in KT E32 spelled as ŋl^{2}k^{2}I, without the I which would have appeared before the l^2 if the scribe had taken *äŋ* to be a word by itself. Its synonym *äŋ baš+la-yu+kï* also got fused.

The phrase *äŋ mïntïn* 'even' should probably also be considered a particle; see the UW for examples: It either qualifies sentences or clauses or (with a meaning similar to Turkish preposed *ta*) phrases.

ayï and *kodï* as in *ayï kodï öpkäsi kälip ...* (Hts V 287) 'he got exceedingly furious' are intensifying particles. *ayï* 'very' appears to be shortened from *ayïg* 'bad', as words like 'terribly' in many languages get downgraded to mere intensifying meaning. *kodï* should not be confused with *kudï* 'down'.

All types of negation are intensified by preposing *idi* 'by (no) means, (not) at all': *idi ok+suz* 'with no interruption at all'; *türk bodun tämir kapïgka ... tägmiš idi yok ärmiš* (Tuñ 46-47) 'It had never been the case before that the United Nation[549] had reached the Iron Gate' and *idi yorïmazun* 'by no means must they roam around' are all three from the Orkhon inscriptions and there are many more inscriptional examples. From Uygur e.g. *siziŋä idi bilmäyöki kalmadï* (Ht VII 1802) 'has certainly not remained unknown to you'. Gabain deals with this particle in the n. to l. 70 of her 1935 edition of a portion of Ht; she quotes a number of instances, some of which show that *idi* need not be adjacent to the negative element. She there spells the word as *'ïdï'* proposing to

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language, where it could have meant 'what'; cf. Latin *siqui, siquid, siquidem*, whose second syllable is a cognate of Persian *či*.

[548] The particles *či* in the Mongolian Secret History and *čU* in later Mongolian (best dealt with in Street 1984) differ somewhat from Uygur *čI* and *čU* (the latter discussed below) both in distribution and function, but may still be related: Uygur *čI* appears in conditional clauses while Mongolian *čU* became part of a concessive verb form. Cf. the adversative or concessive particles *či* in Khakas and *čï* in Shor. Uygur *čI* and Qarakhanid *čU* differ in shape, function and distribution and cannot be equated.

[549] I do follow the semantic interpretations of Tezcan 1991 but there seems to be no doubt that the author was here using the term *türk bodun* to refer to the state in the name of which he was speaking.

connect it etymologically with the verb *ïd-* 'to send'. This is rather unlikely, as the spelling in runiform sources shows d^2. The only place where *idi* appears without an explicit negative is in a description of how the Uygur ruler Bügü Khan made Manichæism his state religion. He there (TT II,1 44) says (among other things) ... *ät'öz mäŋisi ... közümtä idi učuz yinik boltï* '... bodily pleasures ... became quite worthless in my eyes'. This appears to be negative *by sense*, in that *yinik* and especially *učuz* reflect a negative value judgement.

näŋ strengthens negations, signifying '(not) any': e.g. *näŋ kiginč bermädök* 'he is said not to have given any answer'; *näŋ buŋug yok* 'you have no trouble at all'. It can also signify 'by (no) means', as in *näŋ olar mamika kïz üčün busanmazlar* (TT X 523) 'They are by no means sorry about the girl Mamika'. I take this to come from *näŋ* 'thing',[550] discussed in section 3.134. No other originally Turkic words (except *nä* 'what', the presumable source of the two *näŋ*) begin with /n/. Ht VII 636 has *näŋ idi ... yok*, linking two particles. In Manichæan texts *näŋ* gets contracted with (interrogative-) indefinite pronouns: *kimkäŋ* < *kim+kä näŋ* is attested in ManErz 265,24 and, as *kimkäŋ be[rmäz] m(ä)n* 'I don't give it to anybody' in DreiPrinz 71. *k(ä)ntüni kimiŋ näŋ körmäz* 'nobody can see him in any way' (DreiPrinz 14) appears to show the particle doubly, once with and once without contraction. The meaning of *nä ärsär* 'any' is similar, e.g. in *muŋar nä ärsär yazok yok* (PañcFrag II 23) 'He does not have any sins'. Other preposed (probably a bit more lexical) strengtheners are *ärtiŋü, ančakya* and *ar(ï)tï*. The last two strengthen negations, as in *burxan kutïlïg küsüšintä ančakya ymä tïnmatïn ... išiŋä ... arïtï armadï* (U IV A272-3) 'Not leaving off a bit in his wish for Buddhadom, he did not at all get tired ... of his task ...'.

3.342. Connective or adversative particles

The connective and occasionally topicalising particle *ymä* is often postclitic; in fact, it often breaks noun phrases apart, inserting itself after their first element. E.g., it gets introduced between a noun and a demonstrative qualifying it, as in *ol ymä ugurda* 'On that occasion, then, …'(Maue 1996 l. 3,96) or *ol ymä nirvan mäŋisi* 'that bliss of nirvāṇa, now'. Further *bir ymä ämgäktin ozmatïn* 'not saving (themselves) from even one suffering'. *ölü ymä umaz biz* (MaitrH XX 14r17) 'Yet we are unable to die' shows it breaking a verb phrase apart. The source of such behaviour, found also with *Ok* and *mU*, is not that

[550] As French *rien* 'nothing' comes from Latin *rem* 'thing' (accusative) and Latin *nihil* 'nothing' from *ne hilum* 'not a thread'.

the scope of the particles is limited to the first word; rather, it is identical to the phenomenon described for many early Indo-European languages by Wackernagel's law, whereby there is a slot for clitics after the first *word* of sentences.

ymä can also be used in topicalizing function in correlative context, e.g. *bay ymä bar, yok čïgay ymä bar* (KP 6,1) 'There are *both* rich *and* poor people'. In the following example, a still different translation for *ymä* is indicated: *koltgučïlar yïglayu barsar tegin ymä ïglayu kalïr ärti* (KP 10,6) 'When the beggars went away crying, the prince would stay behind, *also* crying'.

Orkhon Turkic has nearly 20 examples of *ymä* and none appears at the beginning of a sentence or of any other syntactic structure. However, at a post-Orkhon stage, *ymä* lost part of its its weak prosodic status. In the runiform ms. Dispute 1 r3-v2 we already find *ymä biri anča temiš ... ymä ikinti är anča temiš ... ymä bo s[av]ïg inčäk öznämišlär* 'Well, one of them said … Then the other man said … This is how they argued about this matter, but …'; there are instances of onset *ymä* also in Xw 177-181. Cf. further *ymä ulugï täŋri ïnča tep tedi* (HamTouHou 1, 1) 'Well, the greatest among the gods said the following'.

mA appears to be a shortened variant of clitic *ymä* (cf. Bang 1909: 235) generally used with pronouns: E.g. in *biz mä uzun yašap ...* 'we also, living a long time, will ...' in ChrManManus, Manichæan fragment r 15; cf. *kayu ma oronta* (BT XIII 13,140) 'at any place', *näčä mä ulïsa* (QB 1371) 'however much he howls', *nägükä mä tïldamayïn* 'not taking anything as pretext' (LeCoqSchriftk 108: 15), *aŋa ma* 'for that as well' (TT VII 41,15), *kim mä yok* (BT XIII 2,75) 'There is nobody at all' or *kim kim mä* 'any person' (HandUigUrk p.456, l.12). The well attested *anča ma* 'so much' (normally spelled as *ančama*) is documented in the UW, in one instance in correlation with *inčämä* / *ïnčama*; so is the less common *ančulayu ma* 'just in that way', attested thrice in M I and also spelled as one word. I have met *nämä*, which replaced *nä* in many modern Turkic languages, only in a very late Tantric text, BeidaFu T1 r2,; an apparently instrumental form *nämän* was, however, read already in Ht I 27 and 54. Cf. also *nägümä* 'any sort of' (Adams 56,29) < *nä+(A)gU ymä*. *ol-ok ma* (M II 11,8) 'that as well' shows that the particle *(O)k* precedes the particle *(y)mä* when both are to be added to a stem.

In a letter (UigBrief C), reflecting spoken language, we find *mä* once after *amtï* 'now' (which is, in fact, deictic like the pronouns); *amtï ma* also appears once in another late text in TT VII. In the same letter we also have it twice after nouns, once signifying 'either' and once 'and':

aka enilär mä barïp körüp kalmaz (9) 'the elder and younger brothers do not come to see us and stay either'; *yerni mä karï kišini unïtmïš bolgay sän* (12) 'you will have forgotten home and your old people'. OTWF 422 (footn. 9) proposed reading *küčäp mä tarïyur m(ä)n* in HamTouHou 29,17-18, where the editor reads *küčäp m(ä)n tarïyur m(ä)n*. The latter is less likely as *-(X)p* converbs and the superordinate verb normally share their subject and there would be no reason to repeat the pronoun. Another instance of *mA* added to an *-(X)p* converb is *ätäkim yadïp ma yükü[nür män]* 'I bow, spreading my skirt.'[551]

birök, signifying 'however' or corresponding to non-temporal 'now', is an adversative connective mostly found in sentences with the verb form in *-sAr*; e.g. in correlative constructions: *kim birök täŋri burxannaŋ bir p(a)dakča täŋlig nom bilir ärsär, ol kälip elig bägkä sözläzün* (U III 29,16) 'Anybody who knows even as little as one line of the divine Buddha's teaching, however, let him come and tell (it) to the king'. A number of examples, many of them at the beginning of clauses, are cited in sections 4.64 and 4.65 below. In MaitrH XV 3v4 it appears with instrumental suffix, as *birökin* (clearly visible on the facsimile).[552]

takï is a conjunction (see section 3.33 for that), an adverb and a particle: It is the latter when its content is temporal, with meanings like 'yet, still': In *tanïm tüsi takï tükätmäzkän ...* 'while my body-feathers have not yet grown' (IrqB 3), *säŋräm takï bütmäzkän ...* 'when the monastery was not yet completed' (Maitr 52r19-22) or *an bitigdä savï takï adïrïp barmayok ol;* (Suv 18,14 + a Berlin fr.) 'In the court register her case has not yet reached a decision' the verb is negative, in *amtïka tägi takï bar ärür* 'it still exists even till now' (BT I A_2 4) positive. As a particle it can further qualify gradable adjectives adding the meaning 'more' (or, with the elative-comparative suffix *+rAk*, 'even' as in *antada takï yegräk* 'even better than that'), stressing the elative. In *takï ur* 'Beat (it) more!' (IrqB 33) *takï* is an adverb. The bi-adverb *ikiläyü takï* signifies 'again' when preposed to noun phrases.

ärsär, the conditional of the verb *är-* 'to be', has evolved into a topicalising particle; see section 4.4. It can signify 'as for' or

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[551] What was read as *xanma* in M III nr. 35 r7, v6 and v8 was by Zieme 1969: 130 taken to contain this element and translated as "auch der Xan". The context of these forms is quite fragmentary, however, and Le Coq attempted no translation. *xan(ï)ma* 'to my khan' or *xan m(ä)n* 'I am the khan' are possible readings, since the fragment is written in Uygur script.

[552] If there are no additional examples for such an instrumental form of this particle, it may nevertheless possibly be an error for *birökči*, with the element *čI* mentioned in the previous section.

'concerning' and is mostly added to noun phrases (including nominals, pronouns, numerals, participles); examples are given in UW 406b-407a. That it is a particle can best be seen in an example such as the following, where the accusative is governed by *sakïn-* 'to think': *bo täŋri kïzlarnï ärsär birär yüzlüg ... sakïngu ol* (BT VII A 666) 'As for these divine girls, one should imagine them as having a (different) face each, ...'. As a particle, *ärsär* does not appear to show any inflexion; *ärsärlär* in BT V 164 cannot be translated as "was sie betrifft", e.g., as the editor does.

3.343. Epistemical particles

The particles of this section generally ask for information or signal what value the speaker is giving to the veracity of the proposition expressed in the sentence, what chance he sees for verification.

The ubiquitous interrogative particle *mU* appears, e.g., in *mini sävär mü siz* (KP 6,4-5) 'Do you love me?'. In Uygur writing as in this example the particle is spelled as MW and not MWY; we think that it followed synharmonism because its vowel is spelled as front in TT VIII H5 and 6: These two are the only instances I am aware of where it is found in front harmony context in Brāhmī writing. There is some discussion of the use of *mU* in section 4.3.

A particle *gU* (otherwise known from Early Mongol) is attested twice in the Orkhon inscriptions in KT S10-11 and in a parallel text in BQ N8: In the first case it follows the predicate it queries while, in the second case, it precedes the sentence which is in its scope. *gU* expects negative answers; see chapter V for more details.

ärinč 'apparently, presumably, no doubt, obviously' (runiform inscriptions and Uygur) appears at the end of declarative (not interrogative) sentences which are never indirective. E.g. *xan bodun tïlïŋa korkup ïnča yarlïgkadï ärinč* (KP 11,3) 'The king probably gave this order because he was afraid of what people would say'. In Orkhon Turkic there are twelve examples, all of them with past reference; one of these is a nominal sentence. Schönig (lecture at the VATEC symposium, September 2002) pointed out that the instances of this particle in the Orkhon inscriptions express respect towards the higher powers, whose activities and motives one does not presume to know about too closely. In later sources *ärinč* appears to have been compatible with all tenses, as we find e.g. *käntü bilingäy ärinč* (KP 10,1) 'I imagine he'll understand (the hint) by himself'. Uygur documentation for *ärinč* is rather limited (see the UW for examples).

The Uygur particle *ärki* mostly appears in interrogative sentences, where it signifies 'I wonder'; it usually indicates that the questioner has no hope of receiving a clear-cut and authoritative answer, either out of genuine doubt or out of politeness and timidity. In declarative sentences *ärki* expresses doubt, to be translated as, e.g. 'maybe; I guess, apparently'. Sentences like *enč äsän bay ärki sizlär* in a letter (UigBrief C5) presumably express a hope as well as a wish: 'Hopefully you are well, in good health and in prosperity'. Exhaustive documentation for the Uygur uses of *ärki* can be found in the UW; it occurs also in Qarakhanid texts. Cf. the etymology proposed for *ärki* in OTWF 321. The UW entry refers to the etymology suggested by Röhrborn 1998a to derive it from *är-gäy*, the future form of the copula. While I would not wish to exclude this as a possibility, the etymology does have some problems.[553]

The DLT has several particles not found in Uygur or Orkhon Turkic. Thus, *lA* (fol.538) is said to have been used by the Oguz (and only by them) to indicate that an action has been verified or completed; today it is attested in other (e.g. South Siberian) Turkic languages. Kāšġarī adds that the use of this particle involves a degree of denying what the addressee has said, implying that the latter does not know about the actual occurrence of the event.

3.344. Volitive particles

The particle *gIl* is commonly added to the 2nd person singular imperative[554] and is used for emphasis. It is always spelled together with the verb form, e.g. in *čaxšaputlug törö yaŋ buzma artatma; täŋri yeriŋä bargu yolug ač; üč tamu yolïn to-gïl* (MaitrH XV 13v13) 'Do not corupt the teaching of the commandments; open up the way leading to the divine place; block the three ways to hell'. *gIl* has hitherto been assigned to morphology, but it has no categorial meaning and is optional. It was rarely used with the negational affix *-mA-*, though we find (M III nr.12 r1) *] yemägil* 'do not eat' in fragmentary context, and e.g. *köŋül[ü]ŋin [...]rmagïl agïtmagïl* (BT XX 948) 'do not … your

[553] A sound passage /äy/ > /i/ is not known to me (though particles could have their own rules) and the /k/ of *ärki* is documented in sources in Indic scripts (as against *g* in *ärgäy*); that is not a decisive counter-argument either, however, as inflexional suffixes do tend to be less variable than opaque words (in view of alternation after /r/ in this case). Röhrborn himself mentions 'koine' examples of *ärgäy* with similar meaning (inelegantly trying to explain them away as "Schreibfehler") and *ärki* is, in turn, attested in such early texts as TT II,2, TT VI and Maitr.

[554] In the Middle Turkic Oguz Kagan text we find *gIl* added several times to the 3rd person imperative form.

mind and do not turn it away'. *gIl* may possibly come from *kïl*, the imperative of the verb 'to do'; this would be similar to saying "Do come!" in English, which (also) consists of two imperative forms. For this hypothesis to be correct, one might have to assume that *kïl-* originally started with a voiced velar. *gIl* occurs already in Orkhon Turkic, e.g. in *yälmä kargu ädgüti urgïl* (Tuñ I N 10) 'Place vanguard and patrols properly!'. In KT S 1 we find the sentence *sabïmïn tükäti ašidgil* 'Listen to my words fully!' where the otherwise identical passage in BQ N 1 only has *sabïmïn tükäti äšid*; the BQ inscription was erected approximately two years after KT. In a Manichæan text we have, e.g., *sezig aytsar ïnča kikinč bergil* (M I 19,12) 'If one asks …, answer as follows:'

The particle *čU*, documented in DLT fol. 535-536 (cf. Brockelmann 1917: 149-150) and also in use in some modern languages,[555] also modifies 2nd person imperatives. Kāšġarī says that *čU* is used only in direct address and gives the examples *käl čü* 'Do come' and *barma ču* 'Don't go'. He also (fol.537) states that one can use *šU* instead of *čU*, giving the examples *bargïl šu* 'Go!' and *käl šü* 'Come!'. Another example of *šU* added to imperatives is *tušu* (< *tur šu*), an exclamation to make donkeys stop (DLT fol.544). *šU* is clearly a phonetic variant of *čU* (/š/ being barred from the onset of original Old Turkic words); the fact that one of the DLT examples has it together with *gIl* therefore shows that *čU* and *gIl* must have meant different things.

The verb form *bol-gay* also became a modal particle or was on the way of becoming one; see section 5.1.

3.4. *Interjections*

(y)a is an interjection mostly postposed to vocative noun phrases, e.g. in *täŋri oglï-ya* 'O son of a god!' (HamTouHou 1, 2); *una amtï biliŋ toyïnlar-a* (Suv 643,17) 'There, now know (it), oh monks!'. Uygur examples of *(y)A* are dealt with in the UW as *a*, the very first entry; we therefore need not list any here.[556] Most of the UW's examples are vocative, which is also the case with an Orkhon Turkic instance:

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[555] Cf. Barutçu Özönder 2001; however, some of the uses of the particles mentioned in this paper go back to a homophonous Mongolic particle. The proposals of this author to consider the syllable °*ču*° in forms like *ančulayu, bulïtčulayu*, the *-čI* in the future suffix *-mAčI* etc. to be instances of this particle are, however, quite unacceptable for semantic, morphological and functional reasons. *čI* (mentioned above) is a different particle.

[556] In U III 57,10$_1$ a male elephant addresses his wife as *katunum subadra a*; this could be an instance of this interjection used after a vowel without /y/ rather than a doubling of the final vowel of the name.

"bäglärim a!" ter ärmiš, "..." (Ongin F7) 'He used to say "My lords! ...". In §2 the UW quotes two or three instances from the DKPAM where *(y)a* is used as an interjection for expressing pain, added to *ämgäk* 'pain' or *ämgäk+im*. This appears to be the main use of this element in the Yenisey inscriptions, most of which are epitaphs (written as if they were utterances of the deceased); it is exceedingly common in those sources, especially in the phrase *äsiz ä* 'Alas!'. We there also find *ačïg-a* 'Oh bitterness!', *ökünč-ä* 'Oh repentence!', *buŋ-a* 'Oh sorrow!'. A second Yenisey function of this element was to be added to verb forms referring to an event one was sorry about. *adrïldïm-a* / *adrïnďïm-a* 'I got separated!', *azďïm-a* 'I went astray!', *ogadmaďïm-a* 'I did not get a chance!', *bükmädim-ä* 'I did not have my fill!'. Vocative uses in the Yenisey inscriptions are *ečičim-ä* 'Oh my dear elder brother!' in E32,11, *oglanïm kïzïm-a, ürüŋüm karam äsiz yüz elig ärim-ä* 'Oh my sons and daughters, my white and black (animals) and my poor 150 men!' in E45,7, *bägim-ä* 'Oh my lord' in E30,5, *yärim-ä suvum-a* 'Oh my country!' E152,3. After an /i/ Uygur texts write a mere *a*, e.g. in *eliglär eligi-a* ‚Oh king of kings!' (U IV A 103); after what is presumably /ï/ there is just *a* in e.g. *baxšï-a* (DKPAMPb 1306) and *vayšir(a)vanï a* 'Oh Vaiśrāvana!' (TT X 324 and 333); but cf. *a m(a)xas(a)tvï-ya* (Ht III 779) 'Oh Mahāsattva'. In Uygur this element appears not to follow synharmonism, as we have a Brāhmī instance spelled *bäg-a* (TT VIII G 56); nor would we necessarily expect it to do so since it is not a suffix. In the Yenisey inscription E15 (dealt with in AnmJen p.56), however, *äsiz-ä* and *äsiz+im-ä* are spelled with the rare runiform letter for Ä: The particle may, therefore, have had a different sort of behaviour outside Uygur.

The §3 of the UW entry refers to cases where *a* is used for forming proper names (cf. the end of section 3.1 above); Röhrborn is probably right in assuming that this comes from the vocative use of *a*. The examples for this are quite numerous, but the author was aware of just one of them when he wrote the entry. In a document in 'Phags-pa script there is a proper name *Savinä*, no doubt to be understood as imperative *sävin* 'rejoice' and this element; this would speak *for* vowel harmony here.

The Ht III example quoted above also showed a vocative preceded by an interjection, *a*.[557] Vocatives are more commonly preceded by *ay* and not *a*. The use of *ay* is described in UW 285a-286a. This entry covers various spellings such as ''Y, 'Y, ' Y Y, ''Y ' and even Y', which could

[557] "*a taŋlančïg* Oh, wonderful!" in Ht III 945 is a mistake for *nä taŋlančïg* 'How wonderful!': N' and '' look identical in most varieties of Uygur writing.

be read as *ay*, *äy*, *ayï*, *ay a* and *ya* respectively and be different interjections; Turkish, does, e.g. distinguish between *ay*, *äy* and *ya* both by sound and by function. In U I 7,10 (Magier) we have *äy* together with *(y)a*, in *äy mogočlar a* 'Oh Magi!'. The element in question is in U I 7,10 spelled with one *alef*; in the following example the vocative element is spelled with two *alef*, whence my reading as *ay*: *ay, kim sän?* (U I 41,5) 'Hey, who are you?'; cf. e.g. *ay yäklär* in U IV A 25 and 61. It is not clear whether these are two different elements or a single one and, if it is a single one, if it is to be pronounced as *äy* or as *ay*; both spellings could, conceivably, be read either way. Whereas *(y)a* (discussed above) always accompanies vocative NPs, *ay* is, in this last instance, used by itself as an exclamation for calling people's attention.

In TT X 301 and 409 *ay* and *a* are combined, in what are exclamations of grief: *ïnča tep tedi: "ay a ämgäk [..."* 'He spoke as follows: "Oh pain! ..."'; *ay a ačïg ämgäk ä!* 'O bitter grief'. *ay a amrak kaŋïčïm-a* (DKPAMPb 838, the same text as TT X; clear on the facs.) 'Oh my dear father!' is also a call of grief, as is an instance in Maitr 117v5. *ay a* in BuddhUig II 296 signifies 'come on!', however, and an instance in BuddhUig II 397 expresses joyful surprise. In UigTot 98 *ay a* expresses the surprise of a person on finding out that he has been dead for a few days, in 201 the surprise at having been born. The UW's referring to *ay a* as if it were a variant spelling of *ay* is unacceptable, as the presence of the additional *alef* is not explained. *ay a* could be a combination of interjections or it could be an independent interjection *aya*; in the latter case the space before the final *alef* could be explained by the need to avoid a reading such as *'änin'*.

UW *ay* III §A,c describes cases where *ay* is used for expressing sorrow. In Suv 623, 9, the mother of the prince who sacrificed his body for the sake of the hungry tigress shouts out *muŋ ay muŋ ay!* 'Oh sorrow, oh sorrow!' when she loses him and then utters a verb-initial sentence when she hears what exactly happened; later, when she sees the pieces of his corpse (626,15-16), she cries out *öŋi sačïlïp yatur äy, kalmïš süŋük yer sayu* 'They lie scattered around, alas, the bones left over everywhere'. UW 285a-b thinks that cases where *ay* is postposed and not preposed represent Chinese loan syntax but it is hard to see how this can be proven: The positioning of emotive elements is notoriously variable. Here and in the next instance, uttered by the prince Mahābala when he sees the starving tigress, *ay* appears be used for attracting the addressee's attention to a third party: *ay irinč tiši bars änüklägäli yeti kün bolmïš* (Suv 610,2) 'Look, it is evidently seven days since the tigress has given birth (to seven cubs, and she is terribly hungry)'.

ya appears in *ya kwotaw, tïnlïglarïg ölürtdiŋ ärsär ymä* 'Oh K., even if you have had creatures killed, ...' (Suv 15,10) and *ya, bökünki kün üzä baxšïmïz šakimun täŋri täŋrisi burxan ... ordumka karšïmka kirü yarlïkadï* (Suv 420,18) 'Hey, today our teacher the Buddha, god of gods Śākyamuni ... deigned to enter into my capital and my palace'. These two instances are not sufficient to define the use and meaning of a particle; nor is another instance in an utterly fragmentary passage (BT XIII 5,213).

awu or *awo* is another interjection expressing pain, attested in MaitrH XXIII 10v6 / Maitr 75r17: *awu tesär, arïčï muŋ tesär* 'when (they) say "Ow!", when (they) say "(Oh) pain! (Will nobody) intervene?"'. Cf. *awa* 'a particle expressing pain' in DLT fol.57.

yïta 'alas' is especially common in the Yenisey inscriptions. In the EDPT this element is quoted in the entry for *ayït-* because Clauson took it to be a converb form, but the converb vowel of that verb is not /a/. Since *yïta* appears to have turned up only in runiform sources,[558] the reading *ayït-a* remains a possibility; *ayït* would then be an imperative form of 'to ask, to speak', hinting at communication (by the shaman?) with the dead. The final *a* would be the interjection so common in those epitaphs, referred to earlier in this section.

äsiz, another Yenisey exclamation of woe, was quoted when discussing the exclamation *A*; it is also documented in the DLT as interjection and also served as a noun signifying 'pitiable'.

täŋrim 'your majesty' (lit. 'my god') is used for addressing male or female 'majesties', e.g. in *nä sav ärki täŋrim* 'What matter is (this), my lord? (MaitrH XX 1r17). In DLT fol.199 we find this to have become *tärim* 'address for princes and princesses from the Khāqānī family'. The appearance of the 1st person singular possessive suffix is similar to French *monsieur*, Arabic *sayyidī* and English as in the translation above; the semantic development is 'lord' → 'god' in English or German (presumably following Classical Greek and Latin) but 'heavens' → 'god' → 'lord' in Old Turkic.

muna[559] (e.g. U III 6,1 and 42,16, TT II,2 80, BT XIII 13,112 and 138 or TT X 125 as completed in TT XNachl) and *ona* or *una* are presentative interjections (like Turkish *işte*, Russian *вот*, French *voila*), roughly to be translated as 'look at this' and 'look at that' respectively.

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[558] What is read as *ïta* in KP 19,6 and *ïtta* in KP 57,3 are not instances of this element; the first must be *ïnča* and the second a locative form as pointed out by Tezcan in *TDAYB* 1975/6.

[559] The AnalInd mentions *mïna* as variant of *muna* but none of the passages there referred to shows this form; nor could I find such a variant anywhere.

The first vowel of *ona* / *una* is not known as it is not attested in Brāhmī or Tibetan writing; I do not know that it survived in any modern language. What morphological relationship there is between that and the pronoun *ol* / *anï* and between *muna* and the pronoun *bo* / *munï* is not clear. The Old, Common and Proto-Turkic dative suffix had a velar in the onset but one is reminded of the Mongolian dative. With these elements the speaker calls attention to an event which has just taken place, is taking place or about to take place, one which is imminent or about to be presented or to an entity the speaker wishes to be noticed: *muna munï bilmiš k(ä)rgäk* (TT II,2 24) 'This, you see, should be known'; *muna amtï balïk ičiŋä kirgäli turur* '(The monster) is, right now, about to enter the town (fragment quoted in the note to TT V A41); *ratna raši atlïg ačari una amtï bo ärür* (Suv 573,20) 'Here now, this is the teacher Ratnarāśi'. The last sentence occurs in direct speech; the context makes it clear that R. is in fact sitting in front of the speaker and the addressee. We further have *una bo ärür* in Ht III 465, V 28,12 and 56,7, VI 38,11, *una bo tetir* in VIII 30,9 (quoted from the edition of the Petersburg fragments), etc. In *azkya öŋrä yorïyu turzunlar; män una basa yetdim* (Suv 615,14) 'Please walk on a bit; I will have reached you in a moment!' the form *yetdim* in fact referring to the future lets the addresees expect the imminent reappearance of the speaker. That *una* is not a mere interjection but has evolved a temporal content of imminence becomes clear when considering the use of *una+kya* 'in a moment' in instances quoted in the note to TT VB 80 and in OTWF 55. The particle *ma* or *mah* which, according to DLT fols. 493 and 539 signifies 'Take it!' or 'Here!', could be a contraction of *muna* (over **mna*).

In MaitrH XIII 4r15 *muna* is followed by an element *čI* (discussed in section 3.341) spelled together with it: *nä ymä ïnča tep teyür siz oronlukum tüšär bolur? munačï bo [...] oronlukuŋuz bo ärmäz mü?* 'Why do you say "My throne is falling down"? Here it is; is this not your throne?' *munačï* appears also in MaitrH XI 7v13, XIII 7v13 etc..

oš oš is in the DLT said to be an exclamation used for calling cattle to drink; this is clearly the same as the Common Turkic presentative interjection of the same shape found in DLT fol.30 as *oš mundag kïl* 'Do thus'. *akar közüm oš täŋiz* (DLT fol.289) can be translated as 'Look how my eyes are overflowing like the sea!'; the use in DLT fol.332 is similar. *oš* became the first part of modern demonstrative pronouns such as *ošol* and *ušbu*.

Exclamatory sentences can be introduced by interrogative-indefinite pronouns such as *nä* ‘what’, *kač* ‘how many’ or demonstratives such as *anča* ‘so’, sometimes accompanied by *ymä* / *mA*; see part V.

CHAPTER FOUR

SYNTAX

Texts consist of sentences interconnected by certain, mostly coordinative principles to be discussed in section 4.8. Orkhon Turkic sentences have a close-knit internal government structure incorporating subordinate predications, but Uygur subordinate clauses are often linked with conjunctions. The question of loan syntax is a vexed one: Most of the Old Uygur texts are translations whose syntax can be expected to have been influenced by the source at least to some degree, especially when the translators were better versed in the source than in the target language. There are some texts, e.g. some written in Brāhmī, which are evidently not even meant to be received as a coherent text but only as a word for word or even morpheme for morpheme rendering; these are disregarded here as far as syntax is concerned. Others can be difficult to understand unless confronted with the source: Chinese art prose style is borrowed e.g. into Xuanzang's letters to the emperor copied into his biography. Many sources can, however, be – subjectively – judged to be 'normal' Old Turkic, if one claims extensive reading to have given one the ability to pass a founded judgement on this question; not forgetting, of course, that Old Uygur may have acquired some lasting ultimately foreign characteristics through contact. Loan syntax seems to be especially conspicuous in Christian manuscripts, e.g. *oxšayur sän sän yalŋuk oglï ol ingäkkä kim ïraktïn üntädi öz buzagusïŋa kim azïp barmiš ärdi. näčük išidti ol buzagu öginiŋ ünin, tärkin yügürüp kälti öginärü, sezigsiz boltï* (ChristManManus, Christian ms. r11-v3) 'You resemble (VSO word order; first *sän* harking back to a language with verbal subject marking in present forms – like Greek), o son of man, that cow which (relativisation with the particle *kim*) from afar called out to her (use of *öz* similar to languages with analytical marker of possession) calf which (same analytical relativisation structure) had gone astray. As (= 'how', as in spoken German) the (*ol*, literally 'that') calf heard (again VSO) its mother's voice, it immediately came running (VO word order) to its mother and was no longer afraid.'

One domain in which sources may especially have influenced our texts is word order, particularly since denotative content is little affected thereby. We will here disregard this possibility, for the following reasons: No research has hitherto been done on this matter;

secondly, possible source texts often exist in several Asian languages and sometimes in different versions; thirdly, there does not appear to be much difference between texts we know to have been translated from different languages.

One important principle of Old Turkic syntax is that there is no automatic agreement in the sense that categories of one word in some construction *have* to be reproduced in some other word. As an example for this principle, adjective attributes are never for any nominal category inflected in accordance with their head. Redundant expression of a category is by no means excluded, however: Some nominal attributes *are* inflected in this way and can then be considered to be appositions. Plural agreement of numerals is common in post-inscriptional Old Turkic especially for living beings. Within the noun phrase we have, e.g. *üč ačarïlar* 'the three teachers' (Ht VIII 67). It is not rare (but by no means rule-regulated) for verbs to stand in the plural also when they have plural subjects; e.g. *alko tïnlïglar mäniŋ yatïm ärmäzlär* 'no living beings are strangers to me'.

Another important feature of Old Turkic syntax is the possibility not to fill out patterns. Argument slots opened up by verbs can be left empty, with two possible consequences: Either the context enables the addressee to gather the reference when the sentence itself does not supply it in some way; if context means textual context, we then speak of zero anaphora. If no reference is retrievable, another possibility is that the proposition is understood to hold for any entity appropriate to the situation, what is sometimes (wrongly) called 'impersonal'. All this holds for all arguments including the subject. *buluŋ yïŋak kararïp körgäli bilgäli bolmadï* (Suv 630,20-21) 'The corners (of the world) got dark and it became impossible to see or recognise anything' is an example with unexpressed direct object which is not implicit either: That we have to add the word 'anything' follows from the fact that the context does not supply us with direct objects for the verbs *kör-* and *bil-*. In other cases entities not referred to should have been known to be quite specific, e.g. *nädä ötrö ulug äŋ(ä)lyon bitig ičintä bašlayu ay täŋrig ögär alkayur, ken ulug elig täŋri xanï äzrua täŋrig ögär* (M III nr. 6 II v16-18 'Why does it, in the great Gospel, first praise and glorify the Moon (i.e. Jesus) and then praise the great king, the king of gods, the god Zerwan?': The Manichæan Gospel (not to be confused with any part of the New Testament) was the first of the seven canonical works written by Mani, the founder of Manichæism. Readers of the text presumably knew that he was the subject of the sentence. English and

German[560] can also, in such a case, use an 'impersonal' construction though the author of a work is known, if the text itself is in focus.

4.1. *Nominal phrases and their categories*

Nouns and adjectives do not differ all too much as to morphology[561] but one might distinguish between them by use. 'Nouns' would presumably be used more as heads of noun phrases, 'adjectives' more as satellites; but instances such as *agïčï ulug+ï* 'the treasurer in chief' (KP 7,7), where the rather general predicate *ulug* 'great' is used as head are not rare at all. Attributive adjectives are not inflected for number, possession or case and show no agreement with their head. See section 3.1 for further considerations related to this distinction.

Nominal phrases are generally referential-denotative if they contain lexemes; if they consist solely of pronouns, they are purely referential. There are also non-referential nominal phrases, e.g. *but* in *but kötürmä tïnlïg* 'a walking creature', literally 'a creature lifted up by legs', or *kut* in *kut kolunč* 'prayer for grace': *but*, the subject of *kötür-* 'to lift', and *kut*, the object of *kol-*, here appear within phrases denoting concepts. The phrases can (and usually are) then put to referential use but no such use is made of *but* or *kut*, which are parts of definitions.

All nominals and adverbs can serve as noun phrases, with or without attributes or other subordinated or appended elements. Since all sentences can be nominalised around participles, many subordinate clauses are also nominal phrases. Nominals can be qualified by other nominals as set forth in detail in section 4.12 and subsections.

The word 'one' is used as indefinite article, e.g. in *antag antag yertä bir köl suvï sugulup ...* (Suv 603,11) 'In a certain place the waters of a lake are withdrawing and ...'; *bir braman [ol] kuvragta taštïn turup ...* (Ht III 801) 'a brahman was standing apart from (that) company and ...'. When the nominal is in addition accompanied by an adjective, there are two possibilities: Either the article appears before the adjective, as in *bir karï öküzüg ... kumursga yemiš* 'An old cow was ... eaten up by ants' (IrqB, a runiform ms.), or it appears after it, as in *adïn bir teva arži* 'another *devarṣi*'. This alternation may be related to the fact that

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[560] Cf. "Weshalb lobt *man* im großen Evangelium, ..." in the translation of the sentence in UW 95b under *alka-* 1). The word I have spelled as *äŋ(ä)lyon* is not mentioned in the UW either under *aŋ°* or under *äŋ°*; the main variant, borrowed from Sogdian, may have started with *oŋ°* but there should, I think, at least have been a cross-reference.

[561] See section 3.1.

karï is more of a lexical complement to the head than 'other', which is referential. There is no definite article, and definiteness is not gramaticalised in any clearly definable manner. Other categories of nominal phrases are possession, number and case. The functioning of the first two of these is described together with their morphology, the expression modalities for possession also in section 4.121.

4.11. Case functions

The case forms themselves are discussed in section 3.124. All case suffixes have a number of functions and it is often difficult to see a coherent whole in them; sometimes, as with the dative, these functions and meanings are practically each others' opposites. We will here deal with the functions case by case, not by their semantics.

The cases which can be used adnominally are the nominative, the genitive and the directive-locative; the equative is so used when it expresses an approximation. The similative can qualify adjectives.

One problem to be mentioned here is a question around verbal nouns and the like in oblique case forms; should *-gU+kA* or *-mAk+kA* be considered to be complex converb suffixes or should they be discussed as dative forms? This depends mainly on whether the suffix sequence has evolved a life of its own and gained its paradigmatic place in the verbal system; in this case it is dealt with as a complex converb suffix. Finding a straightforward answer to this question is not always easy.

4.1101. The nominative

The stem unmarked for case could be used in all functions otherwise expressed by the common case suffixes, except, apparently, (concrete or abstract) motion *towards* and motion *from* a point.[562] In principle, at least, case suffixes can be taken to have originally been (with the just mentioned limitation) as facultative as the other nominal category morphemes: the plural suffix(es) with plural entities, the possessive suffixes with possessed entities and the antonymy and parallelism marker with elements used in parallelism. When context and lexical meaning made the case function of a noun phrase clear, the speaker apparently could, if he had no wish to stress this function, omit its case marker.

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[562] However, the phrase *altun soŋa kälip* 'coming *to* Altun Soŋa' should apparently be read in l.3 of the Yenisey inscription E38: An *Altun Soŋa yïš* with nominative *Soŋa* is mentioned also in E28 C 3.

The function of the nominative as subject is well known. In *bilgä tuñokok bän özüm tavgač eliŋä kälïntïm* (Tuñ W1) 'I, T. the wise, was myself born (or educated) in China' *bilgä tuñokok* can be considered the topic of the sentence, the rest of the sentence being predicated upon this topic. In the following instance word order shows the nominative subject not to be the topic but the predicate: *bo taška ... kop yollug tegin bitidim* (KT SE) 'Everything on this stone I, Y. T., have written'.

In *Bilgä Xagan bo üdkä olortum* (KT S1) the noun phrase *Bilgä Xagan* should also be considered to be the subject of *olortum* 'I reigned' though this verb is in the 1st person. This is possible in some languages, one condition being that there are verb forms inflecting for person. About the sentence *üküš türk bodun öltüg* in KT S6 Grønbech 1936: 136 writes: "Wörtlich läßt sich der oben zitierte Satz gar nicht ins Deutsche übertragen. Dem Sinne nach könnte man ihn etwa wiedergeben: 'Viele von dir, o Türkenvolk, sind gestorben.'"; a nominal subject for a 2nd person verb is unthinkable in German. In *sü barïŋ tedi* (Tuñ 31) 'He said "Army go!"', *sü* could, of course, be either a vocative or the subject of a 2nd person verb. In the 1st person plural, finally, we have the following: *oguzgaru sü tašïkďïmïz*; 'We / I and the army moved out towards the Oguz' is here the best translation. Another possibility would be that, in *sü yorïyïn* 'I intend to draw into the field with my army' and *sü tašïkďïmïz* 'We (the army and I) set out into the field', *sü* has sociative meaning, *yorï-* and *tašïk-* being intransitive verbs. Or else, *sü yorï-* and *sü tašïk-* are lexicalised verb phrases of military language, so that the bracketing (*sü yorï)-yïn* and (*sü tašïk)-ďïmïz* would be possible, getting transferred from the 3rd to the other persons.

The nominative is used for address, e.g. *türk bodun* in *täŋri basmasar, yer tälinmäsär, türk bodun, eliŋin törögün käm artatï udačï ärti?* (KT IE22) 'As long as the sky did not press down (upon you and) the earth did not open (beneath you), oh United Nation, who could have been able to destroy your land and your government?' or *ädgü tïnlaglar* in *körüŋlär ädgü tïnlaglar* 'See, good creatures!' (MaitrH XX 13v3). When it precedes a sentence, a vocative nominative is often coupled with a vocative particle; see section 3.4.

The use of nominative adjectives within predications, as in *amrak oglum, nä üčün busušlug kältiŋiz*? 'My dear son, why have you come in sadness?' (KP 4,5), should also be noted. Such predicative adjectives can even have their own nominal topic, as in *közi yümüglüg olorur ärti* 'He used to sit with closed eyes' (Ht VI 2b9).

The nominative case is also used for nominals denoting things the subject of the verb will become, as *tüŋür böšük bolušup ... bagïr böšük ädgü ögli bolurlar* (TT VI 308-9) 'They become each others' brothers- and sisters-in-law and become friends and well-wishers'. Perhaps unexpectedly, this construction is also used with the verb 'to appear', as in *šakimuni atlïg burxan yertenčüdä bälgürgäy sän* (Laut 26) 'You will appear in the world *as* the buddha called Śākyamuni' or *alp bulguluk burxan yer suvda bälgürmiš ärür siz* (MaitrH XV 11r23) 'you have appeared in the world *as* a buddha hard to encounter'; there is no need for any Turkic counterpart of 'as'.

The nominative is further used in adnominal constructions in which the genitive is also used, as described in section 4.121; the semantic content of the relationship is rarely related to actual 'possession', although the term possessive construction is generally used for it: One example is *oglum savï* in KP 63,2 which, in its context, signifies 'news *from* my son' or '*about* my son'; note that there is here no case suffix although the satellite is quite definite and specific. Other implicit semantic relationships of this construction have to do with 'part – whole', 'place' or 'assignment'.

Direct objects often appear without accusative suffix without being confined to preverbal position (as e.g. in Turkish); e.g.: *turkaru aš ičgü ïnča kolosïnča ašanmak kärgäk* (M III nr.6, 12,3$_2$) 'It is necessary to have one's meals thus, at the right times'. In the inscriptions we find *yälmä kargu ädgüti urgïl* (Tuñ 34) 'Place (the) vanguard and watch-towers well!' or *xagan at bunta biz bertimiz* (KT E20) 'It was we who gave (him) the title "kagan" on this occasion'. BQ E 17, which is parallel to KT E20, here writes accusative *xagan atïg*; the scribe of the BQ may have felt there was here something he wanted to change, but the KT text cannot, nevertheless, be considered to be incorrect. The absence of the accusative suffix is not related to non-specificity, e.g. *kara kum ašmïš* 'They had crossed the Kara-Kum (desert, mentioned also in Tuñ 7)' (ŠU N8) or (in Uygur) *bo nom bititmištä ögirdäči kïzïm* 'my daughter who rejoiced when this book was written (by commission)'; similarly *bo ïdok nom ärdini bititdäči upasi küč ogul* 'the lay brother K.O, who has this holy *sūtra*-jewel written down' or *bo tört sav agïzda tut-* (Wettkampf 27 and 30) 'to repeat these four words'.[563] With possessive suffix, *agïr ayïg kïlïnčlarïm ikiläyü takï kïlmaz män* (SuvSündenbek 75) 'I will not repeat my gravely evil

[563] In an instance like *bo yarlïg ešidip* (KP 18,8) 'having heard this order', on the other hand, *yarlïg could* also have been simplified from accusative *yarlïg+ïg*; cf. *yïglïg* < **yïg-ïglïg* in Abhi B 1404.

deeds', *köŋülümüz amïrtgurup* (TT II,1 72-73) 'calming our hearts', *küčümüz bir ikinti birlä sïnalïm* (Wettkampf 41) 'Let us test each other's strength', *atïŋ atayu* 'calling out your name' (TT I 116) or *öz kartïŋ kartaŋ* 'Treat your own wound!' (DLT fol. 390). In the following example from IrqB LIV (one of the beautiful instances of man–nature parallelism in that text) the suffix in *savï* can only be the possessive suffix, and the two instances can only be direct objects: *kul savï bägiŋärü ötünür, kuzgun savï täŋrigärü yalvarur* 'The servant adresses his words to his master; the raven prays his words to the sky (or to the god)'. Similarly in *tamu yolï tuduŋuz* (Pothi 14) 'You have blocked the way to hell', where the possessive suffix signals the compounding with *tamu*.[564] In the inscriptions, even pronouns can serve as direct objects without accusative suffix, e.g. *bo bitidöktä* 'when I wrote this'. In DreiPrinz 28-30, an early, Manichæan text, we find one direct object without, one with accusative suffix in two adjacent, structurally identical sentences: *ikint[i] käliglika tayak berg[äy] män; üčünč käligli[ka] sapxay(ï)g bergäy män* 'To the one coming second I will give the staff; to the one coming third I will give the sandals.' By the context we know that the staff is not less definite and specific than the sandals; the position of *tayak* just before the verb does not have anything to do with (in)definiteness or (un)specificity either. Zieme 1969: 105 states that the direct object not marked as accusative is more closely linked to the verb, giving these examples: *näčä anïg kïlïnč kïlt(ï)m(ï)z ärsär* 'whatever evil deeds we should have carried out' (Xw 125; I would read *any(ï)g* instead of *anïg*) vs. *üč üdki nomug bilt(i)m(i)z* 'We knew the doctrine of the three periods' (Xw 132). The material does not prove this to be a general rule.

Verbs can govern two direct objects, the first in the accusative and the second in the nominative, as in *kïrkïz xaganïg balbal tikdim* (KT) Translating the nominative form with 'as', we get 'I set up the Kïrkïz ruler as anthropomorphic stele'; translating more loosely one could say 'I set up a *balbal for* the K. ruler'. On the other hand *balbal tik-* could also, in Orkhon Turkic, have become a lexicalised phrase. Another inscriptional example could be *bälgüsin bitigin bo urtï bo yaratdï* (Tes 20) 'This is what he incised and created as his mark and his testament'; here, the forms *bälgüsin* and *bitigin* could also be instrumentals. This instance again shows, in any case, that Old Turkic pronouns representing direct objects need not be in the accusative. The causative of the inscriptional phrase *xagan olor-* 'to rule as *xagan*' is *xagan*

[564] Clark (edition of Pothi) writes *yolï[n]*, although Bang & Gabain indicate no lacuna, stating that the "context requires D[irect] O[bject]"; EDPT 434a tacitly *yolın*.

olort-, as in *özümün ol täŋri xagan olortdï* (KT E26 and BQ E21 complementarily) 'That god installed me as *xagan*'. Cf. *käntü ät'özin bars bälgürtüp* (MaitrH Y 59) 'making his own body appear as a tiger'. Similarly the second instance of *toyïn* in *täŋri burxan ol aržïlarïg "käl toyïn!" temäk üzä toyïn kigürüp ...* (U III 75,2$_1$) 'Buddha enlisted those *ṛṣis* (*aržï*) as monks by saying "Come, monk!"'.

Another type of double object is found in *arïmadok tsuy irinčülärimin bošug kolup ...* (TT IV B50) 'asking for forgiveness for my unpurified sins' and *altï azïgïn ...käyikčikä bušï berü* (Ht III 259-60) '(The white elephant) gave his six molars to the hunter as alms'. Here as well the first object is in the accusative while the second is in the stem form; both are in the stem form in *[b]iziŋä isig öz bušï bergil* (U IV C91) 'Bestow life upon us!'. In these cases one should consider a closer juncture for *bošug kol-* and *bušï ber-* which might, as lexicalised verb phrases, have taken 'the sins' and 'the six molars' respectively as objects of the whole phrases. This approach is clearly appropriate for *burxan kutïŋa köŋül örit-* 'to set one's heart on the Buddha' in BT I 1184, where the whole phrase *köŋül örit-* in fact governs the dative. The status of *tuš* 'encounter' in *keniŋä tözün maytri burxanïg tuš bolalïm* (Pfahl I 10) 'Ultimately we wish to meet the noble Buddha Maitreya' is quite different: *tuš* is not the object of *bol-* 'to be', of course, nor is it its subject: Rather, the accusative is the object of the complex verb *tuš bol-*, whose subject is the 1st person plural.

Predicative adjectives accompanying verbs of thought and sensation as objects also have the base form, e.g. *yakïn* 'near' with *sakïn-* and *busušlug* 'sad' with *kör-* in the following sentences: *ïrak yolug yakïn sakïntï* 'He felt the long road to be short' (Ht VIII 9); *Maxarit eläg ädgü ögli teginig busušlug körüp ïnča tep yarlïgkadï: amrak oglum, nä üčün busušlug kältiŋ*? 'Seeing (that) the well-thinking prince (was) sad, the king M. said as follows: "My dear son, why have you come in sadness?"' (KP 4,5). The adjective *arïg* in *čaxšapatïg bökünki künkätägi arïg küzädtim* (DKPAMPb 1282) 'I have observed the precept perfectly until this day' also belongs to this category.

In *bir tümän agï altun kümüš kärgäksiz kälürti* (KT N 12) 'He (i.e. the Chinese emissary) brought exactly 10 000 (units of) brocade, gold and silver' *kärgäksiz,* a predicative adjective in the nominative case, (literally 'without any missing') is translated as 'exactly'; its use is adverbial.

türk xagan ötükän yïš olorsar (KT S3) 'If the Turk ruler stays in the Ötükän mountain forest, ...' has nominative *yïš* in local function; elsewhere *olor-* governs the locative. The space one moves through can

also be referred to by a nominal in the nominative, e.g. in *yol yorïdačï yalŋuklar* (MaitrH XX 13r16) 'people travelling on roads'.

The nominative is used for expressing time in three ways: Firstly it can express duration: *tün kün* (U III 75,3 or 80,15) is 'throughout day and night' and *isig özin ... üč ay köni ... tuta yarlïkadokta* signifies 'when he graciously kept him alive through three months'. Noun phrases in the nominative with *yaš* or *yïl* appearing as object of the verb *yaša-* are used for stating that certain persons 'lived for so and so many years'. Secondly, runiform inscriptions show nominative temporal expressions in narrative, where the time elapsing during the event is not made salient: *tün terilmiš* is 'They are reported to have reorganised at night' (ŠU E1); *taŋ üntürü tägdimiz* (Tuñ 35) 'We had (the soldiers) get up at dawn and attacked'. Thirdly, deictic noun phrases in the nominative can also express a point in time, e.g.: *bokünki kün sizlär toyïnlar-a ... šravast käntkä pinvantka kiriŋlär* (U III 34,5) 'Today you, o monks, can enter the town of Śrāvasti for alms'.[565] The dative expresses the point in time at which an action takes places if the reference is absolute and not deictic: *yeti yegirmikä učtï* signifies 'he died on the 27th' while *yeti yegirmi kün učtï* would presumably have meant 'he flew for 27 days'. There also is a temporal locative and a temporal instrumental.

In *taloyka kičig tägmädim* (KT S3) 'I did not reach the sea by a little (distance)' (i.e. 'I nearly reached the sea') the adjective *kičig* stands for what can otherwise be expressed by the instrumental.

4.1102. The genitive

The genitive is usually adnominal and thus attributive, as discussed in section 4.121; one pronominal example is *mäniŋ balïkïmtakï bodun bukun* (U IV A26) 'the people in my town', where *män* 'I' qualifies *balïk* 'town'. In section 4.611 we describe relative constructions whose subject is in the genitive. Genitive forms can also be used predicatively, as *siziŋ* 'your(s)' in the following example: *mäniŋ ... kazgančïm siziŋ ärmäz mü?* (KP 16,4) 'Doesn't my gain belong to you? (said by a father to his son)'; also in *bo nišan män Miŋ Tämürniŋ ol* 'This mark is mine – Miŋ Tämür's' (USp 1,10). In *siziŋ män* (M III 24,10) 'I am yours' the

[565] The UW (284b-285a) makes the absolute temporal use of *ay* 'month' into a special lexicon entry (*ay* II). This is not, however, a different lexeme from *ay* 'moon, month'. Nor can an oblique use of the nominative be considered a case of ellipsis of a case ending (instrumental, dative or locative) or a postposition, as the author writes. Such uses are clearly a syntactic matter – the temporal use of the nominative of terms denoting stretches of time – and not a lexical one.

genitive is also predicative although preceding the (presumably clitic) topic. As a headless attributive NP, a genitive form can get governed by a postposition, e.g.: *agïr ayïg kïlïnčlarïm olarnïŋ täg arïzun alkïnzun* (Suv 139,13) 'May my grave sins get purified away and disappear like theirs (i.e. the *bodhisattvas*').

4.1103. The accusative

The accusative marks direct objects as in *šïmnu+g utup* 'defeating Māra'. Numerous Orkhon Turkic examples are mentioned in T. Tekin 1968: 127-129; at least at first sight, none appear to be non-specific. Section 4.1101 mentions numerous examples of direct objects appearing without the accusative suffix even when they are specific and definite. We are at present unable to state any rule in this matter; at least it seems that – in Orkhon Turkic – the accusative form does not appear when the object is non-specific. That may have been different in Uygur *altï kïzlarïg bulun alïp* 'taking six girls as prisoners' (MaitrH Y 204) is what the senseless king Virūḍhaka does when conquering the city of Kapilavastu in Buddhist mythology. The girls were obviously not mentioned earlier in the story and should not have the accusative suffix if that were a mark of definiteness. Since, however, these girls were so beautiful that they resembled divine girls, they may possibly have been specific.

There is a construction of double accusatives (inscriptions and Uygur) when an indirect object in the semantic role of 'sufferer' is topicalised, as in *anta ötrö türgäš karlukug tavarïn alïp ävin yulup barmiš* (ŠU S5) 'Thereupon, the Türgäš robbed the Karluk of their livestock, pillaged their horses and left'. The Karluk are here the ones affected by the fact that their possessions are taken from them. The construction is also used with living beings and their body parts: *adgïrïg udlukïn sïyu urtï* (KT E36) 'He hit the stallion, breaking his thigh bone'. In the following example one of the objects is in the stem form: *munï iki köz täglärip sančayïn* (KP 57,5) 'Let me smite this guy, blinding both his eyes'. Both the person and his eyes are to be pierced, both the person and his eyes to be blinded.

In section 4.622 we discuss object clauses where, in different constructions, their topic or their predicate are put into the accusative case.

4.1104. The dative

The concrete dative of direction is found e.g. in *täŋrilär ... tužit ordoka yïgïlurlar* 'the gods assemble at the Tuṣita palace' or *adnaguka tutuzur*

'he gives (it) to others' (M III nr.8V v5); it expresses direction also with speech, e.g. in *täŋri kuvragïŋa nom nomlayu* 'preaching to the assembly of gods'. The difference between this use and that of the directive is that the dative is used when the goal is reached (or is meant to be reached), whereas the directive mostly expresses mere movement in the direction of something.

There are temporal datives in the passage *koñ yïlka yorïdïm ... tokuz otuzka süŋüšdüm* 'I set out in the year of the sheep ... and fought on the 29th' (inscription of the Uygur steppe empire); the same *tokuz otuzka* 'on the 29th' is attested also in M III nr.2 r8. *yazïŋa* (BQ E31) signifies 'in that spring', the possessive suffix referring to the winter mentioned in the previous sentence (or to the same year as that winter). Sometimes inscriptional temporal datives refer to stretches of time as frameworks for events, as in the sentence *bir yïlka tört yolï süŋüšdüm* (BQ E30) 'I fought four times within one year'. The suffix sequence *-mAk+IŋA* discussed in section 4.633 forms temporal expressions; in Orkhon Turkic, nominal predicates can also be put into the dative to specify the time a certain event takes place. The common expressions *küniŋä, ayïŋa* and *yïlïŋa* mean 'day by day', 'month by month' and 'year by year' (e.g. in KP 7,4-5 and 13,6). Concrete dates such as *üčünč ay iki otuzka* 'on the 22nd of the 3rd month' or *takïgu yïl ikinti ay on yaŋïka*[566] 'on the 10th of the 2nd month in the year of the hen' are always in the dative. Early Manichæan texts also have temporal datives: *ol ok künkä* 'on that very day' (DreiPrinz 108), *ol aylarka* 'during those months' (Windgott 19). In Tuñ 27 we find *kïrkïzïg uka basdïmïz* 'We fell upon the K. while they were asleep'; interestingly enough, the same event is in KT E35 referred to with the sentence *Kïrkïz bodunug uda basdïmïz*. See section 4.1106 for the locative in temporal function.

There appears be a static local dative in the following sentence: *"iki agulug yol bašïŋa, tamu kapïgïŋa azguruglï yolka kim?" tesär* (Xw 116-7) 'If one asks "Who is at the beginning of the two poisonous ways, who is on the way which misleads to the gate of hell?"'. Also e.g. *ol kam köŋüliŋä ïnča sakïntï* 'That magician thought as follows in his heart' (M I 34,18); thus, with *köŋüliŋä ... sakïntï* also in M I 6,17. I know of no such instances in non-Manichæan Uygur.

In *näŋ yerdäki xaganlïg bodunka bintägi bar ärsär nä buŋï bar ärtäči ärmiš* (Tuñ 56) 'If any independent nation anywhere were to have one like me, what trouble could it ever have?' *bodun*, which appears in the dative, refers to a possessor; similarly *muŋar nä ärsär yazok yok*

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[566] This term, literally 'the new (moon)', is used when referring to a day in the first third of a month.

(PañcFrag II 23) 'He does not have any sins whatsoever'. Semitic languages or Latin also have datives of possession; Turkish uses the genitive instead. The dative is basically possessive also in *ögrünčükä mäŋikä bolmakï bolzun* (BT V 149-150) 'May he attain joy and happiness!'. Below we mention a few instances where the dative with *bol-* 'to become' has a different meaning.

The dative can also be abstract, when it marks the aim of an abstract action: *burxan kutïŋa köŋül öritü* (BT I 1184) 'setting one's heart on his majesty the Buddha'. The DLT proverb *sögüt söliŋä, kadïŋ kasïŋa* 'The willow for its sap, the birch or its bark' has the same sort of content without a verb. It is in this sense that the compound suffix *-gU+kA* forms final clauses (section 4.636).

Reference to the action one is directed towards can be generalised by being expressed by *bol-* 'to become': *yïlkïka barïmka bolup* (Xw 152, 177-178) 'being *busy* with tending livestock'; *alkïnču üdkä boltumuz* (M III nr. 12 v3) 'We *have had* the moment of death *on our minds*'. Thus also DLT fol. 355 *közi yolka bolur* 'his mind gets directed towards leaving'.

An instance like *äzrua täŋrikä yazïntïmïz* (Xw 22-23) 'We sinned against the god Zerwan' is again different,[567] as Zerwan is not the beneficiary of the action but the one displeased by it.

In a sentence quoted in WilkKatMan nr. 65 the dative marks the topic of speech: *ätkä kanka "ičmäŋ yemäŋlär" tepän kïnïn ayïtdï* 'Concerning meat and blood he said "Don't eat or drink it" and mentioned its punishment'.

In the following examples entities meant to benefit from the action are marked by the dative: *kün täŋri bo yer suv üzä tugar, käntü yarokïn kamagka yarotïr* (M III nr. 7, 14,10$_1$) 'The sun rises above this world and lets its light shine for the benefit of all'; *ät'özin ämgätip el išiŋä* (M III nr.23 r8-9) 'straining his body for the sake of the state'. In *yegädmäk utmak bolzun maŋa* (M I 28,18-19) 'May I ... attain victory' the beneficiary is also in the dative.

The objects of emotions can be marked by the dative, e.g. *maŋa amranmakïŋïz* 'your love for me' in U III 29,1 or *saŋa amranmakïn ... ölür män* (U III 82,28) 'I die from love for you'. The dative in *m(ä)šixa burxan ... bušï berigli ... kišilärig käntünüŋ ädgü öglisiŋä ädgü ögli tep atadï* (M III nr. 6 I r5) presumably also expresses positive emotion:

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567 If interpreted correctly; the ms. has been read as *täŋrikän*.

'The prophet Christ called ... almsgiving ... persons "compassionate to those who were compassionate towards him"'.[568]

Causes and sources of processes and events are equally expressed by the dative: *täŋrilär täŋri katunlarï täŋri mäŋisiŋä äsürüp* 'the gods and goddesses were intoxicated by divine bliss'; *tavgač xannïŋ ötügiŋä ... alïp bütürmiš* (BT II 105) 'complying with the request of the Chinese ruler … he took it and finished it'. *ol ogurka* in U I 23,17 is 'because of that event'. What we find in *näkä ïglayu busušlug kältiŋ* (KP 5,2) is also causal, whether we translate it as 'At what' or 'Why did you come crying and sad?'. *kork-* 'to be afraid of something' governs the source of fear in the dative, e.g. in U III 75,6; this source could, of course, also be classified as an object of an emotion.

In economical documents the price of a transaction is often mentioned in the dative case.

In *okïgčïka okïtïp* 'having (somebody) called by the herald' the dative marks the intermediate agent which accompanies the causative derivate of a transitive verb. The dative in *sogdak tavgačka ... bay balïk yapïtï bertim* (ŠU) is therefore to be translated either as 'he had B. B. constructed for Sogdians' or 'by Sogdians'. Cf. further *bo burxanlarka kutgarguluk, bo arxantlarka kutgarguluk, bo šarirkä süzülüp kutgarguluk ol* (MaitrH Y 118) 'This one is to be saved by *buddhas*, this one by *arhats* (and) this one by having faith in relics'. The agentive dative is not limited to causatives, however, as shown e.g. in *kalmadï ärki ayïg kälïnč maŋa kälmadok* (BT XIII 13,109) 'There probably are no more (types of) evil deeds not carried out by me'. Similar is *siziŋä idi bilmäyöki kalmadï* (Ht VII 1802), '... has become quite well-known to you' or 'no aspects of it have remained hidden to you'.

The sentence *ötrö maxendrasene elig öz tiri[g] ätözintäki kaparmïš ätin yara bïčïp ak[a] kälmiš söl suvïn iglig ärkä ičürüp ...* (U III 45,13) can be translated in several ways: Either as 'Thereupon, king Mahendrasena split and cut the swollen flesh of his own live body, *had* the sick man *drink* the lymph water which had come flowing ...' or '... *let* the sick man *drink* the lymph water ...' or '... *had* the lymph water *drunk* by the sick man ...'. In other words, the sick man is both the beneficiary and the intermediate agent of the action in which he is either an active or a passive participant. The functions of datives with causative verb forms are further discussed in section 4.5.

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[568] This follows the interpretation of UW 257a top; the editor proposed a causal interpretation (see below), which left *käntünüŋ* unexplained.

4.1105. The directive

The directive is very much alive in Orkhon Turkic. It is there used to express motion towards or to places, e.g. in *bän ävgärü tüšäyin* 'let me (go) home and dismount' (Tuñ I N6) or *ötükän yïšgaru uduztum* (Tuñ I S8) 'I led (them) to(wards) the Ötükän mountain forest'. In the direction of peoples: *oguzgaru sü tašïkdïmïz* 'we started a campaign against the Oguz' (KT N 8); individuals: *apa tarkangaru ičrä sav ïdmïš* (Tuñ I N10) 'we heard he sent a secret message to A.T.' or, with a pronoun, *xagan baŋaru anča ayï ïdmïš* (Tuñ I N10) 'the message sent to me by the king was as follows:'. The object to be reached can also be abstract: *bunča esig kučüg bertökgärü sakïnmatï* (KT E 10) 'without giving thoughts to the fact that they have given so much service'; *öltäči bodunug tir(i)g(g)ärü igi(d)tim* (KT E 29) 'I have reared the dying people (back) to life'.

In Manichæan sources the directive is also relatively common, and most of the nouns used in this case form again refer to places: e.g. *m]anistangaru ter(i)ltiŋ(i)zl[är* 'you have flocked to the sanctuary' (M III nr.27 v5). There are also individuals, e.g. *siziŋ kutuŋuzgaru* 'to your honour' in M III nr.9 II r8, *mani burxangaru* 'to Mani the prophet' in Wettkampf 11, *älgiŋärü* in M III nr.8 V v2 'to his hand' etc.; *siziŋärü* is especially common. No action nouns are known to me to appear in this case form in Uygur, however, as we found in Orkhon Turkic. In some instances, e.g. in the IrqB, the subject clearly does reach his goal, as with the dative.[569]

The directive is rather rare in non-Manichæan Uygur. We find it e.g. in *yakïn kälip bäggärü ötünti ol buryukï* (Suv 637,23) 'He came close and spoke to the lord, that minister.' *ötün-* can also govern the dative, but perhaps *bäggärü* is actually governed by *yakïn käl-*; this is, at any rate, the only example of a non-petrified directive form in the Suv. In the sentence *v(ï)rxarka yakïn yergärü olorup v(ï)rxar ičintä kovuk sovïk arïgsïz kämištimiz* (Maitr Taf 174r28), the form does not appear to have been used in directive meaning, as one does not sit (down) towards a place. Petrified directives such as *ičgärü* 'in', *tašgaru* 'out', *ilgärü* 'forward' or 'towards the east' *oŋaru* 'to the right', *yokaru* 'up', *birgärü* 'to one place' and perhaps a few others appear in all sorts of Uygur texts, Manichæan and other. In *barčada ičgärürük* (BT V 170) 'more internal than everything (else)' we see that *ičgärü* need not have

[569] The difference between concrete dative and directive needs more elucidation. In Tuvan, e.g., the directive is used if an object moves away from the observer, the dative if it moves towards the observer; some such principle might be at play in Old Turkic as well.

had strictly directive meaning even in a Manichæan source. Cf. also *ilgärüsi kerüsi* 'its east and west', used without directive meaning in Ht III 577.

The directive no longer exists in Qarakhanid; the verse *anda bolup täŋrigärü tapgïn ötär* 'Being there he gives his service to God' in DLT fol.555 must therefore be particularly archaic.

4.1106. The locative

The locative refers to placement, e.g. in *Kögmän tagda* 'on the Sayan mountain' (Orkhon Turkic); *ol ävdä* 'in that house' (U III 35,18). It can also refer to states: *Kïrkïz bodunug uda basdïmïz* (KT E 35) 'We fell upon the K. people while they were asleep' (on l.37 with the Türgäš as object). In *ädgü kü at tört buluŋda yadïltï* (KP 7,2) 'The good reputation spread everywhere' (literally 'in four corners') the locative form refers to the domain of the action.

Implements serving as containers are also found in the locative case: *suvlukta täŋridäm suv kälürüp* 'bringing water in a ... water vessel' (U III 38,26).

The temporal use of the locative is apparently not too common. The London (Manichæan script) ms. of the Xw on its l.338 adds *bir yegirminč ay beš otuzda* 'on the 25th of the 11th month' as dating to the text; its copyist appears to have spoken a dialect which differed in this matter from his source. Further examples are *bokünki küntä* 'today' (U III 50,8 as against *bokünki kün* in 34,5), *äŋ kenintä* 'at the end' (U III 31,2) or *siziŋ yarlïgïŋïznï bir ažunta arïg közädgäli taplayu tägintim* 'I have endeavoured to accept your commands so as to observe them *throughout one life*' (U III 36,1). The dative and the nominative are also used for expressing time.

The locative is used also with verbs of motion to mark the goal if the result of the event is a state. In Manichæan texts: *ol ašanmïš aš kim ol ät özintä kirür ölür* (M III nr. 6 II r3) 'That eaten food which enters that body dies'; *ol ï yalpragakï yerdä tüšdi* (ManUigFrag r7) '(The demon hid in a tree, but) the leaves of that tree fell to the ground' or *özi täŋ[ri] yeri ičindä kirti* (l.8 of ms. M 541 edited in the note to BT V 217) 'He himself entered into the divine country.' In Buddhist texts: *dyan sakïnčlïg y(i)ti kïlïč köŋüllüg eligtä kirsär tutulsar* (UigBlock 30-31) 'if the sword – i.e. meditation – enters the hand – i.e. the heart – and stays there, …'; *ikiläyü tamuda tüšmätin* ... (BT II 374-377) 'not falling into hell once again …'; *bašïmtakï etiglig tokïrïm yuplunup yerdä tüšär bolur* (MaitrH XIII 4r6) 'I dreamt that the adorned bun on my head disintegrates and falls to the ground'; *ikinti ažunta bargalï sakïnyok sän*

(U III 48,6) 'you've decided to go to another existence'; not, of course, coming back.[570]

In *ol yäkniŋ üstün täŋri altïn yalŋukta kim ärsär küčin tïdtačï yok* (TT X 104-106) 'There is nobody, neither among gods above nor among humans below, who restrains the power of that demon' the locative indicates membership in a group; it is here translated as 'among'. Similarly *biz ikigüdä kanyusï küčlügräk biz* (Wettkampf 43) 'Who among us two is the stronger?'.

In relatively early texts, including the runiform ones, the locative has ablatival meaning in addition to the locatival one, as in inscriptional *Tabgač xaganta bädizči kälürtüm* 'I brought decorators from the Chinese emperor'. Cf. further *ay täŋri ordosïnta enipän* 'coming down from the palace of the Moon God' (Hymnus 8) and *mintidä ... tutgïl* 'receive ... from me' (Maitr 187r11-12). In Maitr 5r16-17 (missing part completed from out of the parallel Hami ms.) the ms. had the clause *tagda činagantik atlïg [ot kälür]üp* 'bringing the herb named *cīnagandhika* from the mountain', but *barïp* 'going' was subsequently added above the word *tagda*, in order (according to Laut 1986: 62) to get the now unusual ablatival use of the locative understood by the reader. The phrase *ölümtä* / *ölmäkdä oz-* 'to escape death' appears a number of times in IrqB and in l.2 of the hymn mentioned above, and cf. *ämgäklärintä ozg[ur]-* (Maitr 135r16-17), *ämgäktä ozgur-* (KP 6,2). In *siz tidimlïg xanlarnïŋ töz yïltïzda siz* (Wettkampf 49) 'You are from the root of crowned kings' an ablatival locative is used predicatively.

Comparatives always govern the *+dA* form, as in *antada takï yegräk* 'even better than that' or *barčada ičgärüräk barčada üzäräk* (BT V 170-171) 'more central and higher than everything (else)'. They need not have *+rAk,* as in *kamagda öŋrä* 'first of all', *muntada ymä muŋadïnčïg* 'more wondrous than this' (Maitr 26A r3) or *sinidä üstün sävgülük taplaguluk äd tavar bulmaz män* (U III 83,3) 'I can't find anything more highly lovable and desirable than you'.

Elatives can repeat the same adjective, putting it first into the locative case form, as *aglakta aglak* (MaitrH XI 6r10-11) 'most unfrequented', *täriŋdä täriŋ* (Suv) 'exceedingly deep', *artokta artok* (U IV B2) 'very much'.

Relational nouns (discussed in section 4.22) practically always appear in the locative. This holds not only for local and temporal ones such as *ičintä* 'in', *öŋüŋüzdä* 'before you', *üskümtä* 'in my presence', *kenindä* 'after' but also for the ones with abstract meaning such as *yolïnta*

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[570] Another DKPAM instance of *bar-* + locative appears in Udayana 7; the editor in a note expresses his opinion that this is rare and quotes three further instances from Suv.

'concerning', *ugrïnta* 'for the sake of', *tïltagïnta* 'because of', *küčintä* 'due to' or *tüšintä* 'as a result of'. I take it that the non-local ones, such as *tïltag* 'reason', *küč* 'force' or *tüš* 'fruit', do this in analogy to the ones having local or temporal semantics in the first place, such as *yol* 'way' or *ugur* 'point in time, occasion'.

4.1107. The directive-locative / partitive-locative
With *+rA* we have to distinguish between living uses with partitive-locative meaning and petrified forms, which we have called directive-locative. Among these latter *tašra, ičrä* and *asra*[571] are local, while *öŋrä* 'before' and *kesrä* 'after' are temporal; the late BT III 891 adds *tüp soŋïra* 'at the very end' < *soŋ+ra*, which is also temporal. We find the directive-locative in a number of functions: The forms are, first of all, used adnominally, both by themselves as *ičrä sav* in Tuñ 34 'internal (perhaps 'secret') letter', *asra mansïz sakïnčlar* 'humble unassuming thoughts' (TT II,2 68) or *öŋrä ažundakï kïlïnč* (TT VIII F 15) 'an action in a previous incarnation', and with *+kI*, as *ičräki* (also lexicalised as a title) and *öŋräki* (*öŋräki eliglär* 'the ancient kings' in TT I 93); we even have *äŋ öŋrä* 'earliest'. The inscriptions used the *+rA* forms in pairs, to represent opposite topics: *ičrä ašsïz, tašra tonsuz* (KT E26, BQ E21) 'no food in their stomachs and no clothes on their backs', *beriyä tavgačïg, öŋrä kïtañïg* (Tuñ 7) 'in the south the Chinese, in the east the Kitans' or *üzä kök täŋri asra yagïz yer kïlïntokda* (KT E1) 'when the blue heaven was created above and the brown earth below'; in BQ S13 *kesrä* and *öŋrä* are opposed in a similar way. In adverbial use we find them in *ičrä bän bulgayïn* (ŠU S4) 'I will stir up internal dissent' *öŋrä kün tugsïkda* (KT E4) 'in the east, where the sun rises' or *tašra yorïyur* (KT E 11-12) 'They are marching out'; documentation for directive-locative forms as postpositions is given in section 4.21: *kesrä* and *tašra* are found to govern the locative, *asra* the nominative, *öŋrä* and *ičrä* either the locative or the nominative.

In living use we find *+rA* added to names of body parts of persons or other creatures, which are also referred to as such in the sentence: *süŋün yüräkrä sančït-* (Maitr Taf 33r8) is 'to be pierced at one's heart by a lance', *kušlar kargalar kälip töpörä sokup karakïmïznï sačraturlar* (Maitr Taf 203r5 = MaitrH XX 13r4) 'birds and ravens come, pick at our heads and gouge out our eyeballs'. *bašra täpip* (U III 14,3) appears

[571] The Uygur use of *asra* and *asrakï* is documented in the UW; see the EDPT for their cognate *as+tïn*, which was in use from Qarakhanid on (both in DLT and QB).

in fragmentary context but the DLT has four instances of *bašra* 'on the head' all connected with the meaning of 'striking' or 'hitting'.

The 'body part – body' relationship prompted the term 'partitive-locative'; if the reference to living beings is by noun phrase or pronoun, the nominals referring to that whole are placed in the accusative: *üč adrï süŋün olarnï ogsuz täginčsiz öz konokra sančarlar* (Maitr Taf 75r16) 'they pierce them with tridents at any moment at the seat of their soul (*öz konok*)', In *bir ikintiškä közrä kulkakra sančïšur biz, tïlïmïznï bïčïšur biz* (Maitr Taf 174v29) 'We stab each other in the eye and the ear and cut each other's tongue' and in *agulug oqïn yüräkrä urup amrak isig özin üzgil* (U III 55,4) 'end its (i.e. the elphant's) dear life, hitting (it) at (its) heart with a poisoned arrow', we find that the body parts *köz, kulkak* and *yüräk* are put into the partitive-locative case while *tïl* and *isig öz* are in the accusative with possessive suffix. For the first group there is explicit or implicit reference to the owners of the body parts, the speaker in the first sentence, the elephant in the second; this reference is taken up by possessive suffixes in the second part of the sentences, but that is linked with a switch to the accusative. In *orgaklar kälip bizni tüprä orarlar* 'Sickles come and mow us off our roots' (Maitr 201v9) the speakers and victims are plants and not living beings; it is not clear whether plants are in principle included in the domain of *+rA* or whether the use of this suffix here indicates that the plants are being metaphorically assimilated to (suffering) living beings. Note that this partitive-locative use is compatible with the victim (e.g. *bizni*) or a part of his body + possessive suffix (e.g. *tïlïmïznï*) being put into the accusative, but that the *+rA* noun itself is incapable of such reference by possessive suffix. In *täŋri burxan yarlïgïn töpörä tuta täginip käntü käntü ärgüsiŋärü yadïltïlar* (TT VI 464) 'They respectfully brought the divine Buddha's decree to their heads and dispersed each to his own abode' the action is a gentle one, unlike the other instances quoted. This is also an example for all the ways in which *+rA* and *+gArU* (which some had thought to be related or even identical) differ: the former referring to a body part without possessive suffix, the latter referring to a place and coming with a possessive suffix which refers to the subject of the two verb phrases.

4.1108. The ablative

The ablative expresses 'source', as in *ögdin kaŋdïn bälgürmiš ät'öz* 'the body which emerged from mother and father' (as distinct from the spiritual body; Maitr 26A r12), or *täŋri yerintin tayarlar* 'they slip down from the divine land'. In Manichæan texts we have, e.g.,

xormuzta täŋrig tamudan yokaru agturtï (M I 13,19) 'They raised the god Ohrmizd up from hell'; *ïg yaŋï yerdän temin örtürürčä* (M I 14,11) 'as one straightway grows a plant from fresh earth'; *töpödän türaŋak učïŋa [tägi* (M I 17,19) 'from head to the tip of the (toe-) nail' etc.; many more examples are mentioned in Zieme 1969: 115. Ablatival content is, in all runiform and most Manichæan sources, mostly expressed by the suffix *+dA*, and some Manichæan texts have both *+dAn* and ablatival *+dA*. The examples *ot kim ïgačdan ünüp yana ïgačag örtäyür* 'the fire which arises from a tree and then burns the tree' (M I 7,3) and *tonnuŋ biti kim kišinäŋ tärisintä ünüp yana kišinäŋ kanïn käntü sorar* 'the clothes' louse which arises from a person's skin and then itself sucks the person's blood' (M I 8,15) occur in the same passage of one and the same text and are intended to serve as similes for the same phenomenon; yet one has *ïgač+dan* while the other uses the form *tärisin+tä*. But then fire and lice do not behave in the same manner; in English one would also say that lice arose *in* somebody's skin (as believed in the Middle Ages). A flame has an upward movement by nature and continuously, which is not the case with lice (presumably not while being born, at any rate). From looking at the examples of *+dAn* (which is the form most Manichæan texts have) and of ablatival *+dA* one gets the impression that their uses are not identical: The former is generally used of physical movement away from a source, while the latter refers to sources from which the subject merely separates or keeps apart, serves in comparison, is governed by postpositions like *ken* 'after'.

oz- and *kutrul-*, both 'to be saved, escape', as well as their causative counterparts govern the ablative or the ablatival locative; e.g. *alp adalarïntïn oszunlar* (thus the ms. in Pothi 233) 'May they escape their grave dangers', *bo adatïn kutrulgay sän* (DKPAMPb 228) and *tamutïn tüzüni ozkurtuŋuz* (Pothi 68) 'You have saved them all from hell', *ulïnčïg a[žun]larïntïn kutgarïp* (Pothi 119) vs. *ölümtä ozmiš* (IrqB XLIX) 'She escaped death' and *ämgäktä ozgurgay sän* (KP 6,2) 'You will free them from suffering'.

In section 4.635 we mention a number of examples in rather late texts of the ablative added to the infinitive or to verbal nouns such as the one in *-dOk* to express cause.

The DLT proverb *küč ildin kirsä törö tüŋlüktin čïkar* shows ablatives in prolative meaning; it signifies 'If violence comes in by the (tent's)

entrance,[572] proper conduct goes out by the smoke hole'. Orkhon Turkic and Uygur use *+čA* as prolative case.

The ablative formed with *+dIn* ~ *+dAn* is not easy to distinguish from the orientational formative *+dXn* (which, in fact, often appears as *+dIn* in Buddhist texts): The latter never has ablatival meaning, is added to bases whose actual interpretation is deictic and can be used adnominally; the former never qualifies nouns.[573]

4.1109. The equative

Examples for the original spatial meanings of the equative are rather rare. One of these meanings is limitative ('up to a certain point)', e.g. *belčä boguzča suvda yorï-* (KP 36,4) 'to walk in water reaching up to one's waist or throat' or *tizčä* 'knee-deep' (MaitrH XXV 3v19). Another spatial meaning is prolative ('by a certain road'); e.g. *frišti utuzup adïn öŋi yolča yorïtdï ol mogočlarïg* (U I 9, Magier) 'the angel led the Magi by a different way'; *kök] kalïk yolïnča* (DKPAMPb 215) 'through the sky' or *ögnüŋ agïzča kirip* 'entering by the mother's mouth' (BT VII A 262-3). It is this meaning which also gave *kanča* 'where to' and the like. I take the prolative meaning of *+čA* to have been the primary one, as the passages from that to accordance or similarity seem to be likely semantic paths. In the previous section we mentioned a Qarakhanid instance of the ablative used as prolative case.

Quantitative approximation is a content often expressed by *+čA*, as in *gaŋ ögüzdäki kum sanïnča* 'as many as the sand particles in the river Ganges' (U II 47,83) or, adnominally, *äligčä är* (Tuñ 42) 'approximately fifty men'. *köŋülčä* is 'as much as one's heart desires'. *barča* 'all' is presumably also constructed from *bar* '(what) there is' by using *+čA* in such a quantitative use, originally presumably meaning 'as much as there is'. *tükä-gü+čä* in *näčä taplasar tükägüčä tavar algïl* (U

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[572] *il* is the base of *ilgärü* 'forward, eastward' and *ilki* 'first' because the entrance of the early Turks' tents were made to face the rising sun.

[573] Examples for orientational *+dXn* are *ikidin äyägüsintä* 'from his ribs on both sides' (DKPAMPb 207) and *orton* (< **ortodun*) *yol* 'the middle way'. *ol yäkniŋ üstün täŋri altïn yalŋukta kim ärsär küčin tïdtačï yok* (TT X 104-106) signifies 'There is nobody, neither among the gods *above* nor the humans *below*, who restrains the power of that demon'. (BT I D 186). *+dXn* forms can also be used as postpositions governing the locative or the nominative; cf. section 4.21. In *kiši alasï ičtin, yïlkï alasï taštïn* (DLT fol. 58) *ič+tin* and *taš+tïn* are used predicatively; this proverb can perhaps be best translated as 'An animal's leprosy is visible; a person's leprosy (metaphorical for treachery) is hidden'. *+dXn* forms can get possessive suffixes referring to the orientational centre: *tagdïn+ïn+ta* (e.g. in Ht III 275) signifies 'to its north'. Forms like this last one show that *+dXn* is not a case suffix, as its place is before, not after the possessive suffix.

III 47,19) and *ärdni yenčü kämikä tükägüčä urup* (KP 34,3) has a similar meaning: 'Take as much stuff as you like, till there is none left' and 'loading as much jewels and pearls on the ship as there were'.[574] More documentation for *-gU+čA* and *-mIš+čA* expressing limitative quantification is quoted at the end of section 4.124. Many instances of the very common *bunča* (*munča*) and *anča* also refer to quantification, as *anča ämgänip* (KP 47,3) 'going to so much trouble'.

Just as often, however, *+čA* expresses abstract accordance, e.g. *bodunug äčüm apam törösinča yaratmïš* (KT E 13, BQ E 12) 'he organized the nation according to the tradition of my ancestors'; *kïyïnïg köŋlüŋčä ay* (Tuñ I N8) 'pass judgement as you see fit', lit. 'according to your heart'; *yalŋuklar sanïnča bögsär* 'if one sums (it) up by human reckoning (as against divine years which, in Buddhist mythology, are considerably longer)' or *tokuzunč kay törösinčä altunlug kürekarnïŋ ärdnilig toranïnta olorup* 'sitting among the jewel nets of the golden tent in the manner of the ninth stratum'.

There is an equative 'of judgement' with *sakïn-*: *tiši kišilär(i)ŋ körkin mäŋizin näŋ yokča ädligsizčä sakïnur* (M III nr.8VII r8-9) 'He thinks of female persons' appearance and face as (*+čA*) nought and worthless' or *bäksiz mäŋüsüz ät'özüg bäkčä mäŋüčä sakïnïp* ... (Gedank p.133) '(I) considered the fickle and transient body to be stable and durable'.

Similarity is also expressed by this suffix: *ikinti kün örtčä kïzïp kälti* (Tuñ II W4-5) 'the next day he arrived red-hot as fire'; *kanïŋ suvča yügürti, süŋüküŋ tagča yatdï* (KT E24) 'your blood flowed like water, your bones lay there like a mountain'. In this last function *+čA* was in competition with the similative (and with the postposition *täg*): We have *arpača sačïlmïš* 'scattered like barley' in Hymnus 3 but *[ka]vïklayu sačïlu* 'getting scattered like chaff' in (late) Neujahr 29.

In *sücig savïn yïmšak agïn arïp ïrak bodunug anča yagutïr ärmiš* (KT S5 = BQ N4) 'They used to cheat them with sweet words and soft textiles and thereby used to attract the distant tribes to their vicinity' the form *anča* refers to means (detailed in the first part of the sentence) used for the purpose expressed by the main verb.

+čA is often added to names for peoples to form adjectives, as *änätkäkčä* 'Indian'. The reference to languages by equative forms also comes from this special use of similative *+čA*. The target language of translations can appear with *+čA*, e.g. *k(ä)ši ačari änätkäk [ti]lintin toxrï tülïnča yaratmïš, [pra]tnarakšit ačari toxrï tülïntïn [türk] tülïnča ävirmiš maytrisi[mit] nom bitig* (MaitrH XX Endblatt v7-9) 'the

[574] In his note to his edition of the KP passage, Hamilton argues for translating *tükägüčä* as 'as much as is necessary'; this is possible.

doctrinary text Maitreyasamiti, which master K. adapted from Indian to Tokharian and master P. translated from Tokharian into Turkic' or *tavgač tïlïnča agtar-* (Ht VIII 48) 'to translate to Chinese'.

+čA can, finally, be added to adjuncts such as *ašnu* 'previous(ly)' and in such cases makes their adjunct function more explicit.

The name 'equative' has been retained for this case form only out of convenience, to accord with general Turcological usage; equative meaning is not in any way central to the use of Old Turkic *+čA*.

4.1110. The instrumental

One of the meanings of the instrumental morpheme is instrumental in the narrow sense, as *amarï tamuluglarïg irig erpäkin erpäyürlär, kärkin yonarlar, baltun yararlar* 'They saw some of the dwellers of hell with large saws, hew them with axes, split them up with hammers' (MaitrH XV 3v25-26), from *erpäk, kärki* and *baltu* respectively. The instrumental is used for expressing a tool or a means to an end already in Orkhon Turkic *ok+un* 'with an arrow' (KT E 36). In *bo yolun yorïsar* 'if we walk this way' (Tuñ I S8) the way is the 'means' for carrying out one's aim. The subject's body parts are also instruments, e.g. in *tumšukïn tarmakïn tarma-* 'to scratch with their beaks and claws' or in *ol känč ogulkya ... iki kolučakïn atasïnïŋ boyunïn kučup ...* (DKPAMPb 197) 'that sweet little boy ... embraced his father's neck with his two little arms ...'. In the sentence *bodisavt yarlïkančučï biligin ïnča sakïnč sakïnur* 'In his commiseration, the *bodhisattva* has the following thoughts' we find the instrumental in its most abstract instrumental use.

ämgäklig / katïg / ulug ünin ulï- / külüš- / müŋrä- is 'to moan, to laugh or to bellow with a painful, strong or loud voice'. The voice is here no longer an instrument in the narrow sense, in that the subject does not make conscious and purpose-oriented use of it.

The instrumentals in *ag(a)r kadgun ulug busušun yanïp bardï* 'He burned away in great grief and sorrow' (early Uygur), *saŋa amranmakïn ... ölür män* 'I die from love for you' (U III 82,28), *äsrökün ögsüz bolup* 'getting senseless through drunkenness' (M I 6,16) or *tïnlïglarïg ... ärtiŋü ämgäkin ölürür* (TT X 50) 'He kills the creatures with great pain' may all express manner, circumstance or what brought the event about; cf. *tïltagïn* 'because' and *nä tïltagïn* 'why'. Here the instrumental does not, of course, express a conscious means either.

Measure is expressed e.g. in *tužit täŋri yerintäki yïl sanïn sanasar* 'if one counts by the reckoning of years of the Tuṣita heavens'.

The instrumental expresses manner in *bodun ... yadagïn yalïŋïn yana kälti* 'the people came back on foot and practically naked' (KT E 28). It

expresses posture in *töpö+n* 'head down(wards)', in phrases such as *töpön tüš-* 'to fall head downwords; to bow with one's head on the ground' or *töpön yatgur-* 'to make somebody lie down with one's face to the ground' both attested several times.

Its appearance is frequent in temporal expressions, as in *kïšïn* 'in winter' (BQ S 2), *ol üdün* 'at that time' (Xw 7), *sön* 'for some time' (Xw 9), *nä kolon* 'at what moment' (M III nr.7 III v15-16); as non-referential temporal in *temin* 'just now', *tün+ün kün+ün* 'by day and night' or *yïlïn ayïn turkaru äv bark ičindä ada tuda ägsömäz* (TT VI 62) 'Continuously, through years and months, hazards and calamities at home do not stop'.

It has been said that the instrumental does not have local meaning (Gabain 1950: 10, a.o.). With *amga korugun kïšla-* 'to spend the winter in the goat reserve' in Orkhon Turkic, however, and in *čït+ïm+ïn yayladïm* 'I spent the summer within my borders' (ŠU) a purely instrumental meaning would I think, be very unlikely. Another spatial use of this case, already mentioned above, is the 'path'.

The use to which *baš+ïn* from *baš* 'head' is commonly put does not enter into any of the mentioned categories; e.g. *sankï č(a)kr(a)v(a)rt elig xan bašïn säkiz tümän tört mïŋ bäglär* (MaitrH XVI 2a7) 'the 14000 lords headed by the *cakravartin* king Śaṅkha.'

With *är-*, the instrumental suffix describes states, e.g. in *äsänin ädgün är-* 'to be well' (UigBrief A), *tirigin är-* 'to be alive' (BT V 220; also 517-8 and 523), *käntü ymä arïgïn turugun ärür, üzüksüz arïgïn ärmäkig sävär amrayur* (M III 8 V r 6-7) 'And he himself keeps pure, and loves being clean all the time'. *kutlugun kïvlïgïn ornanur* (TT VI 101) 'He dwells in blessing' may be similar, or the 'blessing' may be instrumental in the narrower sense.

Schinkewitsch 1926 gives examples for the use of the instrumental in the DLT, stating that it is fully productive in that source.

4.1111. The comitative

This rare case gives the meaning '(together) with'. It appears as *+lXgU* in inscriptional sources, as *+lUgUn* in Manichæan ones. Examples for the latter are *täŋri üč täŋrilärlügün ... kälir* (M III 31,2$_1$, nr. 13II r2) 'The ... god comes with the three gods', and *täŋrilär söz+in+lügün yäkkä süŋüšgäli kälti* (Xw 2) 'with the word of the gods he came to fight the demon'. In *anïg kïlïnčlïg š(ï)mnulugun beš törlüg yäklärlügün süŋüšdi* (Xw 4-5) 'He fought with the evil-doing devil and with the five classes of demons' and *ot täŋri sön yäklügün süŋüšüp* (Xw 74) 'the god

of fire fought with the demon a long time ago'[575] the comitative is also reciprocal in content. In BQ E33 we have *iniligü* 'together with a younger brother', in BQ E41 *eki üč kišiligü täzip bardï* 'he fled with two or three persons'.

4.1112. The similative

The similative in *+lAyU*, common in Orkhon Turkic, Uygur and Qarakhanid with nouns in all semantic domains and with pronouns, signifies 'like, similar to, as if'. Its use appears to have been mainly adverbial, in accordance with its origin as a converb form (*+lA-yU*). The common Orkhon Turkic expression *oplayu täg-* 'to attack like a threshing ox' already has this case suffix. The form is discussed, with numerous examples, in OTWF 406-9. Cf. further *yultuz+layu tizilmiš* 'arranged in a row like stars' (Ht III 532), *säkiz yïŋak barča küzäčläyü čokradï* (Ht VII 816) 'The four corners of the earth boiled like a pot' or the adnominal instance *yul+layu bay* 'rich as a fountain' (Ht VIII 177). *munïlayu* signifies 'thus', whereas *anïlayu ok* (with *ok* in all examples known to me) has a more sentence-adverbial function. The similative was in competition with the postposition *täg* and with the case suffix *+čA* when used with similative meaning (rather rare in Old Turkic).

4.12. Complex nominal phrases

Old Turkic complex nominal phrases are practically always syntactical constructions with one nominal phrase as head and another one as satellite. It is quite rare for them to become one word; such an instance is *ät'öz* 'body', in Semitic scripts always spelled without space between its parts (*ät* 'flesh' and *öz* 'essence; self') but with an *alef* before the rounded vowel. Three instances in BuddhKat (Tibetan script) and nine instances in TT VIII and Maue 1996 (Brāhmī) spelled *ätüz* show that it was treated as one word: In non-first syllables of words, /o ö/ appear only if the preceding syllable is also /o/ or /ö/ or if the word ends in a /k/ immediately following upon the vowel in question. (There are, on the other hand, 24 Brāhmī instances where it does show *ö* in the second syllable.) *künt(ä)ŋri* is, e.g., spelled as one word in TT X 288; it denotes the 'sun', not necessarily as a deity. *yer suv*, literally 'land [and] water' signifies 'country'; we find the two words spelled as one in TT X

[575] A further, fragmentary instance of this phrase appears in Xw 9.

371.[576] Proper names formed with the element *xan* 'ruler' are discussed in OTWF 76-7.

There is a variety of complex nominal phrases; we here group them according to whether their satellite is possessive, descriptive, deictic or quantifying. Descriptive satellites specify the meaning of the head. The difference between deictic and possessive ones should become sufficiently clear when considering pronominal satellites: *ol* is deictic, its genitive *anïŋ* possessive. Descriptive, deictic and quantifying satellites are not, as such, NPs, and do not establish any reference relationship distinct from that of their head; possessive satellites, on the other hand, do establish a reference relationship of their own, unless they are sortal (generic in a sense, in which case they in fact describe the kernel). Any morphology relating to the syntactic use to which the nominal phrase as a whole is put is borne by the head and not the satellite; such morphology will be disregarded in this section.

4.121. Nominal phrases with possessive satellite

What is commonly termed as 'possession' is often expressed with both the possessive suffix on the head and the genitive of the satellite: Pronominal examples are *mäniŋ süm* (ŠU S9) 'my army', *mäniŋ yutuzum* (M I 5_2) 'my wife' or *biziŋ üzütümüz* 'our souls' (Xw 8). In the last instance the phrase is an apposition to 'the fivefold god who is the son of Hormuzta'; the identity of this god with *our* soul is indeed something to be stressed.

Nominals can, in addition, be qualified by a demonstrative (as in Italian, unlike English, French or German), e.g. *bo biziŋ ämgäkimiz* 'this suffering of ours' (TT X 68); or by an adjective. An adjective need not follow the genitive of the personal pronoun but can also precede it, as *amrak mäniŋ oglum* 'my dear son' (DKPAMPb 1024), *k(a)mug mäniŋ sürügüm* (BT V 941-2) 'my whole herd', *yavaš mäniŋ ögüčüm* (BT XIII 12,111) 'my dear gentle mother'. *altunlug kürekarnïŋ ärdnilig toranï* 'the jewel net of the golden temple' and *satïgčïnïŋ ödi ärigi* 'the merchant's advice' are instances with nominal satellite. When a nominal satellite refers to a person other than the third, the possessive suffix of the head is also of that person, e.g. *män xwentsonuŋ küčüm* (HtPek 89r5-11) 'my, Xuanzang's, powers' or *män kïtay kayanïŋ ... kïtay oglanïm* (SUK Mi3,2) 'my, Kïtay-kaya's ... Chinese servant'.

For an example like *tonnuŋ biti* 'clothes' louse' (M I 8,14) the context makes it clear that clothes and louse are generic: In Old Turkic it does

[576] This ms. may have been particularly prone to such spellings or its editor may have been especially sensitive to them.

not seem to be the case that genitive satellites are specific while non-adjectival satellites in the nominative are generic (as we know it e.g. from modern Turkish).

Text organisation can get other parts of a sentence intervene between a genitive and its head; thus in the following example (TT X 104-106), where *yäk+niŋ* 'the demon's' is a satellite of *küč+in* 'his power (acc.)': In *ol yäkniŋ üstün täŋri altïn yalŋukta kim ärsär küčin tïdtačï yok* 'There is nobody, neither among the gods above nor among humans below, who restrains the power of that demon' the demon is the topic. There is no justification for the view expressed by Gabain in her note to the passage that this is an instance of "untürkische Wortfolge".

In instances as the following the head has the 3rd person possessive suffix but the satellite is unmarked: *kelän käyik muyuzï* (TT I 42) 'the horn of a unicorn', *täŋri yeri* 'divine land', *xan süsi* 'the royal army', *kögmän irintä* 'north of the Sayan (range)', *burxanlar tamgasï* 'the seal (i.e. the last) of the Buddhas', *beš täŋri yarokï* 'the light of the fivefold god', *nom kutï* 'the holy doctrine', *sansar ämgäki* (U II 81,68) 'the sufferings of *saṃsāra*', Orkhon Turkic *köl tegin atïsï* (*yollug tegin*) '(Y.T.,) the nephew of K. tegin'. Plural satellites need not be in the genitive either: *täŋrilär sözinlügün* (Xw 2) 'with the word of the gods'; *täŋrilär ordolarï titräyür* 'the palaces of the gods are trembling'. Another instance where both head and satellite are in the plural (the head being marked by possessive suffix) is *bo yagïlar kïzlarïn ... bïčïp käsip* (MaitrH Y 211) 'cutting up (the bodies of) these daughters of enemies'. Even satellites shown to be definite by having possessive suffixes do not have to be in the genitive, e.g. *oglum savï* (KP 63,2) 'news from my son' or *ïzïm bälgüsi* (Ht III 318) 'the mark of my footprint'. These contents are not, of course, very well described with the label 'possessive', since no possession is involved.

In some cases, what looks like this construction may be one nominal phrase only at first sight; the following sentence could instead be an instance of the 'double subject construction' (discussed in section 4.4): *antag antag yertä bir köl suvï sugulup on mïŋ balïklar künkä köyüp ...* (Suv 603,11) could signify 'what happened to a lake in some particular place was that its waters got drained and 10,000 fish got burned by the sun'. The relationship between *bir köl* and *suvï* would then be not one of government within a single nominal phrase but one of apposition; *bir köl* might have been mentioned as topic while *suvï* would be the actual subject of *sugul-*.

Relatively rarely the attribute stands in the genitive although the head has no possessive suffix. This happens in the inscriptions (e.g. *mäniŋ är*

'my men'; *Yegän Silig bägiŋ kädimlig torug at* 'the harnessed bay horse of S. *bäg*, the khan's nephew' in KT E33), most often in lamaistic texts of the 14th century. Further examples are *säniŋ alïmčï är käldi* 'Your creditor came' (UigBrief D 6, a personal letter) and *biziŋ beš yüz ärän* 'our 500 men' (KP 53,4-6). In instances in Classical Uygur, the satellite is often a highly honored person or entity; e.g.: *eligimiz kutïnïŋ ïdok y(a)rl(ï)g üzä* (Ht VIII 58) 'by the holy order of his majesty our king' or *t(ä)ŋri burxannaŋ bir p(a)dakča täŋlig nom* (U III 29,16-17) 'as (little as) one verse from the divine Buddha's teaching'. In Manichæan texts: *t(ä)ŋ[rim], m(ä)n siziŋ yultuzu[g] körüp kololap* ... (M III nr.13 v7) 'My lord, I have viewed and observed your star …'; *siziŋ üdrülmiš frištilär* 'your chosen messengers'; *siz tïdïmlïg xanlarnïŋ töz yïltïzda siz* (Wettkampf 49) 'You are from the root of crowned kings'. Two hymn titles, *vam vayïnuŋ baš* 'the hymn of the god Vam' and *b(a)γ roš(a)n zaw(a)r žiriftnuŋ bašta* 'the hymn to god, light, power and wisdom' (M II 9 and 10 respectively) show the same structure.

Sometimes heads appear without possessive suffix and attributes in the nominative although the relationship is neither appositional nor adjectival, as in *balïk kapagda olor-* (KP 64,7) 'to sit at the city gate' or *beš ažun tïnlïglar* 'the beings of the five existences'. *kün orto* 'noon' would seem to be of the same type, as its literal meaning is 'the middle of the day'.

There is an adnominal partitive locative with referential satellite, as in *ol yäklärdä ulugï* (ManUigFrag r5) 'the leader of those demons'.

As a rule, the genitive precedes its head; this was the case in all the examples quoted. An occasional exception occurs e.g. in Windgott, which has *äkinti* / *üčünč* / *törtünč* / *bešinč ärdäm(i) sävinč(i)*[577] *yel täŋri küčiniŋ* 'the second / third / fourth / fifth virtue and joy of the power of the wind god' as titles of text sections. The text is a translation from Parthian and the translator clearly copied the word order of his source, in which all the corresponding phrases follow their head as well. Making the genitives precede would have pushed the ordinals out of the prominent first position.

4.122. Nominal phrases with descriptive satellite

When satellites do not refer to a possessor, do not quantify and are not deictic they *describe* the head. When neither the satellite nor the head have any morphology, the satellite is most often an adjective, as in

[577] There are some lacunas in the text but it is also clear that there is an intended stylistic variation, the possessive suffix being either present on both terms, present only on the second (making that an instance of group inflexion) or absent on both.

Orkhon Turkic *yïmšak agï* 'soft textile'. Heads can also be adjectives governing other terms, e.g. degree adverbs. Further expansions of adjectives have the shape *-gAlI učuz* 'easy to ...' and *-gAlI tägimilig* 'worthy of ...', where they govern the supine; examples for this construction are mentioned in section 4.23.

In a case like *beš yüz tämir talkuklar* (U III 47,8) '500 iron pegs' the attribute is the name of some material, like 'iron' or 'wood'. Such attributes have at least some adjective characteristics; cf. German 'eisern', French 'en fer'.

In other instances the attribute is a proper name, e.g. *orkon ögüz* 'the Orkhon river', *ram ay*, the name of a month, or *kögmän tag* 'the Sayan mountain (range)'; or the whole phrase is a proper name, as *yel täŋri* 'the Wind God', *suk yäk* 'the Demon of Greed'. The attribute in *takïgu yïl* 'the year of the hen' is a proper name in a sense, as no real hen was probably denoted: To the Old Turks, the association of years with particular animals was presumably already arbitrary.

kulum küŋüm bodun 'the nation (consisting of) my male and female slaves' (ŠU S9) and *köl tegin atïsï yollug tegin* 'Yollug *tegin*, the nephew of Köl *tegin*' (KT SE) are instances of apposition; the satellite here refers to the same entity as its head, unlike possessive satellites: *kulum küŋüm* and *bodun, köl tegin atïsï* and *yollug tegin* are coreferential. With *kedin [änät]käk yerintä* (Ht VIII 11) we know only because of the context that we should not translate it as 'in the country of western India' but as 'in the west (as seen from China, where the text was written), in India'. Note that 'in the west' is not *kedintä,* the locative suffix being applied only once, after the second element: It turns out that apposition applies group inflexion to noun phrases as well. Appositions can also follow the head, e.g. *yašovati kunčuylar ärdinisi* (Maitr 51r31) 'Yaśovatī, the jewel of ladies' with a metaphorical phrase. *yegädmäk utmak bolzun maŋa agdok karï petkäči mar išoyazd maxistak üzä* 'May I, the worthless old scribe, attain everlasting life through his holiness the *maxistak* Išoyazd' (M I 28,19) shows an apposition in the nominative, *agdok karï petkäči,* to *maŋa,* a pronoun in the dative case. Even a whole clause can be an apposition, e.g. the one with *ärtökin* as head in apposition to *munï* in the following instance: *munï körüp bodisatv, montag osoglug ärtökin, ... ärtiŋü korkdï sezinti* (Suv 630,10) 'He saw this, the *bodhisattva*, i.e. that this was the situation, and became exceedingly frightened ... and worried.'

The most elaborate descriptive satellites are the adnominal relative clauses; these are described in section 4.61 and its subsections.

A further way to link nominals is for the satellite to get the suffix *+lXg* with no suffix on the head. Such instances can be classified into two main groups: Either the two nominals have two distinct referents or they refer to the same entity. In a first type, the content of the satellite can be said to be 'at' the content of the head, or the latter to 'have' the former; e.g. *didimlïg bašlar* 'crowned heads' (Maitr) or, with inalienable possession, *azïglïg toŋuz* 'a tusked boar' (KČ 18); in principle, *+lXg* has no content of its own but merely serves subordinative concatenation. The satellite often has a further qualification, as *altun öŋlüg ... sïgun* (U IV C58) 'a golden-coloured deer', *sukančïg tözlüg nom* (BT I D 197) 'a pleasant-natured doctrine' or, with a nouny qualifier, *urï oglanlïg ävči* (Heilk II 2,65) 'a woman with male offspring'. The satellite can also be a verbal abstract whose subject is the head, as in *yavlak sakïnčlïg rakšas* (U IV A66) 'an evil-thinking *rākṣasa*'; the *rākṣasa* (a female demon) is here doing the thinking (*sakïn-*).

Some *+lXg* forms specify the material of which the referent of the head is made; *altunlug kürekar* 'golden temple', *altunlug lenxwa* (BuddhStab II 23) or *tämirlig tag* (U II 25,26) 'iron mountain' consist wholly of gold and iron respectively; such satellites appeared also without *+lXg* (cf. *tämir talkuklar* quoted above). In *t(ä)ŋri kïzlarïlïg terin kuvrag* (U II 30,29), the 'gathering' (*terin kuvrag*) is made up of 'divine maidens' (*täŋri kïzlarï*). This is the second general type of *+lXg* construction, and it is found only in Uygur.

Sometimes the head is a borrowed element while the satellite is original Turkic, as in *takšutlug šloklar* (BT I $A_2$40) 'verse *gāthas*' or *bodisatavnïŋ kalmïš süŋüklüg šariri* (Suv 627,16) 'the remaining bone relics of the *bodhisattva*': Here the verse and the *ślokas*, the bones and the relics are identical and coreferential, though their respective denotees *may* be different; the words *may*, however, also have been felt as mere translations of each other.

The following are relatively short examples of metaphorical *+lXg*, also found only in Uygur: *keniŋä burxan kutïnlïg kölök üzä nirvanlïg konoklukta konar* (Pfahl I 8) 'In the end he will settle in the resting place that is *nirvāṇa* (which he will reach) with the vehicle that is Buddhadom'; *dyan sakïnčlïg y(i)ti kïlïč köŋüllüg eligtä kirsär tutulsar* (UigBlock 30-31) 'if the sword – i.e. meditation – enters the hand – i.e. the heart – and stays there, …': In each of these cases, the head is the metaphor for the satellite. In *sansarlïg tägzinč* 'the *saṃsāra*-whirlpool' the whirlpool serves as metaphor for the manner in which souls are, according to Buddhist doctrine, whirled around among the various this-

and otherworldly ways of existence. Buddhist Uygur literature shows numerous and often quite involved examples of extended metaphors which make use of *+lXg*. OTWF § 2.91 has more details on this formative; the uses listed above are the syntactic ones.

The relationship between *kan* and *ögüz* in *tïnlïglarïg ölürür, tärisin soyar, kan ögüz akïtar* (KP 2,4) 'They kill living beings, flay their skin and spill rivers of blood' can be called metaphorical quantification.

Then there is the Old Turkic *bahuvrīhi* construction, where the satellite itself is a nominal clause whose topic includes reference to the head. Here is an example, where *köz*, the topic of the satellite clause *közi yarok* 'his eye is bright' has the possessive suffix to refer to *ïdoklar* 'the saints': *közi yarok ïdoklarka bargïl yakïn* (ETŞ 12,18, verse) 'Go close to the bright eyed saints.' Such complex attributes can also be used predicatively; e.g. *sav+ï süzük* and *köŋül+i katïg* in *savï süzük köŋüli katïg tetmiš siz* (Ht VII 2128) 'You are said to be clear of discourse and firm of heart', or *köŋül+i ögrünčülüg* 'joyed of heart' in *ol ödün yagï w(o)rm(ï)zt bo savd[a] ötrü köŋüli ögrünčülüg bolmadï* (Wettkampf 73) 'Then the valiant Wormïzt no longer enjoyed this matter'. In the following sentence (Warnke 434-439) three *bahuvrīhis* alternate with *+lXg* and adjective satellites: *ayayu tutdačïlar uzun yaš+lïg bolgu ärip ïnčïp yana öz+i kïsga bolmïšlarï közünür; yavïz y(a)vlak [ölü]tči etitči kišilär kïsga yaš+lïg bolgu ärip öz+i uzun bolmïšlarï közünür; arïg süzük köŋül+i yïgïglïg [kiši]lär ärtiŋü bay barïm+lïg bolgu ärip ïnčïp yana čïgay [...]g+lig bolmïšlarï közünür* 'Those who care about honour should have long lives but in fact their lives turn out to be short; evil and murderous persons should have short lives but it turns out that their lives are long; people who are pure and serious should be very rich but instead they turn out to be poor'. The *bahuvrīhi* construction helps underline the contrast between *kïsga*, the predicate of the first sentence, and *uzun*, the predicate of the second. See Erdal 1998b for further thoughts on this.

Local expressions ending in *+dXn* or *+rA* appear in adnominal use, e.g. *ikidin äyägüsintä* 'from his ribs on both sides' (DKPAMPb 207), *taštïn ilinčükä ün-* (KP 5,4) 'to go out for a pleasure outing' (from *iki* 'two' and *taš* 'outside' respectively) or *asra mansïz sakïnčlar* 'humble unassuming thoughts' (TT II,2 68). Other local and temporal constructions are made adnominal by *+kI*, as elaborated upon in section 3.126; e.g. *yazkï ärümiš yuka buz* (Ht VII 731) 'the thin melted ice of spring'. A partitive relationship can be expressed by adding *+dA+kI* to the satellite and having *birisi* 'one of them' or some other head with a possessive suffix; e.g. *inmelun šastr ärsär inčip samtso ačarï ävirmiš*

änätkäkčä bitiglärdäki birisi ärür (Ht VIII 29) 'As for the Yin ming lun *śāstra*, it is one among the Indian writings translated by Xuanzang'; *tört buluŋtakï ädgüsi uyurï terilipän mäŋiläyür* (IrqB 28) 'The best and most capable people among those of the whole world assemble (there) and rejoice'.

It happens that postpositional phrases are used adnominally, e.g. in *yugant üdtäki täg ulug bädük ot yalïnlar közünür* (MaitrH XX 1r12) 'There appear fires and flames as big and tall as in the *yugānta* age'; the phrase *yugant üdtäki täg* here qualifies either the two adjectives *ulug bädük* 'big and tall' or the noun phrase binome *ot yalïnlar* 'fires and flames'. The sentence *ada öčü(r)gü üčün sakïnč ayu berälim* (TT VA 75). does not signify 'Let us tell (you) thoughts so (you) can allay dangers' but 'Let us inform you of the meditation (serving) the allayment of dangers'; the postpositional phrase is, again, adnominal, qualifying *sakïnč*. This is shown by the context, where other meditations serving different purposes are mentioned. Postpositional phrases are dealt with in section 4.21, where we mention two instances of adnominal *birlä* phrases (one qualifying an adjective, another a noun). A very special type of construction dealt with there is that around the element *ulatï*, which is used when the head names a set, of which one or more members are to be mentioned attributively: Examples of this can be translated either as 'my classmates, including (or 'above all') John' or 'John and my other classmates'; note that, in the second type (where *ulatï* governs the locative and not the nominative) English can not make the 'classmates' into the construction's head. *bašlap* (e.g. in Suv 5,8) has a similar function.

Two nominal attributes can be linked by *är-ip*, a converb of the copula; e.g. *aglak ärip köŋülkä yarašï oron* (BT VII A361) 'a solitary place which is beneficial to the heart'; *särmälip akar suvlug ärip säp säm aglakta* (UigStab A10) 'in an absolutely isolated place with pure flowing water'; *utpal öŋlüg ärip iki kollug, oŋ eligintä vačïr tutdačï ... ulug küčlüg maxakalaka yükünür biz* (BT XIII 25,15) 'We bow to mighty Mahākāla, lotus coloured, two armed, holding the *vajra* in his right hand ...'. There are further examples for this in UW 408-9, §36 of the entry for *är-*.[578] None of the instances are pre-classical.

Consider finally the noun phrase *bökün bar yaran yok bäksiz mäŋüsüz ät'öz* 'the fickle and transient body which is here today and gone

[578] Röhrborn writes "zur Trennung von komplexen Attributen ... ungleicher innerer Struktur," but the attributes in the last mentioned example are identical in structure. The UW translates *särmälip* of the UigStab A10 example (there quoted as "UigStab 117 o. 10) as "reinigend" but *särmäl-* is 'to get strained', hence 'purified, limpid'.

tomorrow' (r12 in Gedank): The attributes *bö+kün bar* and *yaran yok* show the predicates *bar* 'existent' and *yok* 'non-existent' used attributively and accompanied by temporal adverbs and thus come close to being verbless relative clauses (cf. their translation).

4.123. Nominal phrases with deictic satellite

Beside their pronominal function, the demonstratives *bo* and *ol* are also common as ('pro-adjectival') satellites, and then do not get inflected for case or number: There is no satellite concord in Old Turkic.[579]

When a noun is accompanied by both a demonstrative and one or more adjectives, the demonstrative normally precedes the adjective or the adnominal noun. The inverse order is, however, possible, as in *umugsuz ïnagsïz bo tïnlïglar* 'these hopeless and destitute creatures' (U II 4,7, in a rather early text), *aklančïg utun bo sansar* (BT III 902, a quite late source) 'this repulsive and shameless *saṃsāra*' or (perhaps by poetic licence, for the sake of the rote-rhyme) *arïg gadirakud ol tagta* (BT XIII 7,1) 'on that pure *Gṛdhrakūṭa* mountain'.

Interrogative-indefinite pronouns are also used attributively, both in their interrogative and their indefinite uses. Here is an example for indefinite *nä* used in a correlative pair: *nä ymä taštïn sïŋarkï bälgülärig nä ymä ičtin sïŋarkï [bälgülärig] adruk adruk tüllärig koduru kololasar* (MaitrH XI 3r29-30) 'if one meticulously examines any external or internal signs (there may be) as well as the different dreams'. Indefinite *kač* and *kayu* can also serve adnominally.

The reflexive pronouns *käntü* and *öz* appear in adnominal use both in their nominative and their genitive forms and then signify 'own'; examples for this are quoted in section 3.133. Where Orkhon Turkic has attributive *käntü* to show that the head is assigned ('belongs') to the sentence topic, Uygur uses *öz* instead. A further way to rhematise possession is through the genitives of personal and demonstrative pronouns (sometimes combined with *öz*). Attributive demonstratives and possessive pronouns can be used together in one noun phrase, as in *mäniŋ ol kaŋïm xan* 'that father of mine, the king' (KP 16,1).

4.124. Nominal phrases with quantifying satellite

Numerals are joined to their head without marker, e.g. *eki šad* (BQ E 21) 'two *shads* (a title)'; but names used for referring to tribal confederations such as *Üč Karlok, Tokuz Tatar* or *Säkiz Oguz* are not normal quantifications unless shortened from *üč* (*karlok bodun*) 'the

[579] There appears to be a single exception in *bolar yalŋoklar* 'these persons' (Fedakâr 239); the language of the mss. in Sogdian script is aberrant in other ways as well.

three Karlok peoples' > (*üč karlok*) *bodun* 'the Three Karlok people'. Numerals demand no number agreement in that heads do not have to be in the plural, e.g. *üč otuz balïk* (Tuñ 19) '23 cities'. In Uygur, however, it is not rare to find the plural suffix in nouns accompanied by number words, often when referring to well-known and closed groups; e.g. *ol üč yäklärig anx(a)rw(a)z(a)nta badï* (M I 19,1) 'He bound those three demons to the zodiac'; *on mïŋ balïklar* (Suv 603,11) '10,000 fish'; *säkiz tümän tört mïŋ ... balïklar* '84000 ... towns'; *altï kïzlarïg bulun alïp* 'taking six girls as prisoners' (MaitrH Y 204). *[ka]tïg tïgrak bürtgäli yumšak iki ämigläri* (TT X 445) 'her two breasts, firm (but) soft to touch' shows a numeral following other attributes.

Zieme 1969: 97 put together the material for the appearance of *+lAr* with nouns in Manichæan texts, when these nouns are qualified by numerals or by the quantity words *kamag*, *kop* and *alku* all signifying 'all', by *üküš* 'many' or by *amarï* 'a few, some, a part'. It turns out that, in the sources reviewed, the vast majority of nouns referring to humans or to mythological beings (with the exception of *beš täŋri*, which signifies 'the fivefold god' and not 'five gods' in Manichæan mythology) have *+lAr* when quantified. When these elements qualify nominals referring to other entities, these do not, in those texts, normally get the suffix *+lAr*. On the other hand the singular is by no means excluded with the first group and the plural not at all excluded with the second. More work clearly needs to be done on this matter.[580]

In *alku bizni barča utup yegädip* (U IV A 266) 'surpassing all of us' the head is a personal pronoun: 'allness' is here expressed both by *alku* and *barča*, but *alku* is attributive to *biz* while *barča* is predicative. In *anï alku ökünür biz* (TT IV A76) 'We repent all of that' the head is a demonstrative, if I understand it correctly to be qualified by *alku*.

A further quantifying adnominal construction, described in OTWF section 3.106, uses deverbal nouns in *-(X)m*: *är turumï suv* (DLT) 'water the depth of a standing man' from *tur-* 'to stand' is construed just like *süŋüg batïmï kar* (KT E 35 and BQ E 26) 'lance-deep snow' from *bat-* 'to go under'. *yüz čigin uzunï ïgač* (DKPAMPb 1345) 'a plank which is a hundred feet long' shows that lexemes other than *-(X)m* forms were also possible in the construction described there.

We have Orkhon Turkic examples for the addition of approximative *+čA* to adnominal numerals, *äligčä är* 'about 50 men' in Tuñ 42 and

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[580] Predicative nominals are generally not put into the plural even when referring to humans, as *ol kïzlar kapagčï biz tep tedi. ... kapagčï kïrkïn biz tedilär* (KP 41,5-42,6) 'Those girls said "We are doorkeepers." ... They said "We are female doorkeeper servants.".'

yüzčä ärin 'with approximately 100 men' in BQ E37. Cf. further *eki üč kišiligü* 'with 2 or 3 people' in BQ E41 and *eki üč bïŋ sümüz* (Tuñ 14) 'our two to three thousand soldiers'. In *bökünkičä uzun* (BT V 148) 'long as on this day' we find an equative form (see section 3.126 for what precedes the equative suffix) qualifying an adjective.[581]

In *sän ölürmišča tïnlïglar* 'as many creatures as you have killed' (Suv 15,18), *bo bïšurmïšča ätlärig ... yeŋlär* (BT XIII 3,53) 'eat (pl.) up this cooked meat', *akmïšča kanlarïn yalgayur* (BT XIII 3,75) 'She licks up the blood which comes out' and *bulmïšča sudurlarïg šastarlarïg ïdok yarlïg üzä aktaru ärür biz* (Ht VII 1021) 'By holy (i.e. imperial) order we are translating as many *sūtras* and *śāstras* as we can find' the adnominal quantifying equative subordinates a headless relative clause of the type discussed in section 4.622. Attributive *-gU+čA* expresses accordance, degree or limit: *yakïšï urï körgüčä yer* (TT X 512) 'a place for the *yakṣa* boy to see (what was happening)', *ärŋäk učïn sančguča yer oron* (MaitrH XV 2r8) 'a place the size of a hole (*sanč-* 'to pierce') one would make by the tip of one's finger' or *näčä taplasar, tükägüčä tavar algïl* (U III 47,19) 'Take as much goods as you wish *to the degree of using them up*'; there is another instance of *tükägüčä* in KP 4,1-4.

4.2. *Adjunct phrases*

Adjunct phrases are distinguished from adjuncts in that the latter are a cluster of parts of speech comprising adverbs, postpositions, conjunctions and particles, whereas the former are sentence parts defined by their syntactic function. Adverbs (discussed in section 3.31) are the part of speech whose task it is to serve as adjunct; adverbs can therefore serve as adjunct phrases as nouns can serve as nominal phrases. Postpositions, on the other hand, are, as such, *heads* of adjunct phrases; a number of them can be used as adverbs by themselves and some postpositional phrases can serve as satellites in nominal phrases. *As* postpositions they cannot be adjunct phrases by *themselves*. Relational nouns, again, can be used by themselves as adjunct phrases only inasmuch as they can also be used as postpositions (as happens with *ara* 'intervening stretch') and can dispense with possessive

[581] I take the form *sukïgïnča* in *ärŋäk sukïgïnča üdtä* (Maitr 197v12 and elsewhere) 'in the time it takes to snap one's finger', i.e. 'in a moment' not to consist of the *-gInčA* gerund of *sukï-* but to have been formed by transparently adding the possessive and equative suffix to *sukï-g*. *-gInčA* was apparently created in the same way (cf. section 3.286) but was clearly already fused in the earliest texts.

suffixes. Noun phrases in some case forms, e.g. the instrumental, also often serve as adjunct phrases.

Adjunct phrases must be distinguished also from adjunct clauses, discussed in section 4.63 (and subsections). The phrases in the construction found in *äŋitä ät'özin* 'with bowing body', *külčirä yüzin* 'with smiling face', *titräyü ünin* 'with a shaking voice', *yašru köŋlin* 'with secret intentions', *titräyü* or *kamšayu ät'özin* 'with a shaking body', *tälmirä közin* 'with languishing eyes', *tikä kulgakïn* 'with cocked ears' or *yinčürü töpön yükün-* 'to do obeisance' seem to me to be adjunct phrases by form but adjunct clauses by meaning: They always have a body part, the body as a whole or an abstract inalienable entity in the instrumental case as kernel and a vowel converb referring to the activity in which that body part etc. is involved used adnominally; what is expressed is, however, something carried out in conjunction with the main activity. See OTWF p.770, note 506 for references to the passages where these phrases are found.

There are a number of adjunct phrases in the sentence *näčädä temin öglänip ötrö äliglärin örö kötürüp ulug ünin ulïdïlar* (Suv 619,18-20) 'At some stage, a short while after that they regained their senses, they raised their hands and wailed loudly'. *näčädä* is a temporal indefinite pronoun, *temin* and *ötrö* are temporal adverbs but *ötrö* also serves as postposition, *örö* describes the direction of movement in space and the instrumental case form of the phrase *ulug ün* 'large voice' describes manner; *ötrö* and *örö* are petrified converbs. *äliglärin örö kötürüp might* be an adjunct *clause* (see section 4.631).

Converbs themselves should, of course, also be defined as adjunct phrases when they are not adjunct clauses. Take the sentence *t(ä)ŋriniŋ ulug küčlüg sarsïg arvïšï ol yäkig [b]asa tutar* (M III nr.3 r 13-14) 'The great strong and terrible spell of the god … holds down that demon'. *bas-a*[582] 'pressing', here translated as 'down', merely qualifies the verb and must be considered to be part of the single main clause; the two verbs describe one and the same action.

The following two sentences (MaitrH XX 1r2 and 10 respectively) show various types of adjuncts which are syntagms and not single adverbial lexemes, qualify the action and do not represent entities participating in it: *yer suvlar suv üzäki kemi osoglug altï törlüg täpräyür kamšayurlar* 'The worlds shake and rock in six ways, like a ship on water'; *kuvrag yïgïlmïšta ken turum ara törtdin yïŋak ulug tigi čogï ün kügü eštilür* 'After the congregation assembles, suddenly a big

[582] Not to be confused with the similarly formed adverb – postposition – relational noun, which has a different meaning.

sound and noise is heard from four directions'. There is, first, the noun phrase *altï törlüg* 'of six types' unmarked for case, which might also qualify nominal heads but is here used adverbially. Then there are the four phrases *suv üzäki kemi osoglug, kuvrag yïgïlmïšta ken, törtdin yïŋak* and *turum ara*, of the type which has been called exocentric, which cannot be used for reference to arguments of propositions. The first of these phrases describes the manner in which the event referred to takes place, as does *altï törlüg*. *törtdin yïŋak* describes the source from which the sounds referred to in the second sentence are heard, the four points of the compass in fact being understandable as 'all directions'. *yïŋak* is, in fact, a noun; it is so used e.g. in *ozgu kutrulgu yol yïŋakïg ol nomta äšidip ...* (Pothi 63), where *ozgu kutrulgu yol yïŋak* is 'the way to salvation'. Cf. the definition *tört yïŋak tört buluŋ säkiz yïŋak bolur* (TT V A 62) 'The four directions and the four corners make the eight cardinal points'. The use of *yïŋak* in *törttin yïŋak* is very similar to that of the postposition *sïŋar* dealt with below, which also has nominal uses. *kuvrag yïgïlmïšta ken* and *turum ara* are temporal expressions, the first specifying the point in time in which the main event takes place, the second its (short) duration. *turum ara* is a set phrase signifying 'immediately, on the spot', documented in UW 172 b under *ara*, § B e; it could therefore be listed in the lexicon as a unit, if Uygur has no instances of *turum* except in this phrase (but cf. *turum* 'height while standing' in the DLT). The phrase does, nevertheless, have a transparent structure, *ara* 'between, among' being in Old Turkic primarily used as a postposition. It is, however, also used as an adverb in the phrases *ičin ara biliš-* 'to be acquainted with each other', *ara tur-* and *ara kir-*, both 'to intercede',[583] and as a relational noun e.g. in U III 13,7-9$_2$: *k(a)ltï yultuzlar arasïnta ay [tilgäni] nätäg čoglug yalïnl(ï)g közünür ärsär ančulayu ymä elig bäg olarnïŋ arasïnta čoglug yalïnl(ï)g közünti* 'The king appeared among them brilliant and resplendent as the moon appears brilliant and resplendent among the stars'. The postposition *ken* 'after', which we find in the phrase *kuvrag yïgïlmïšta ken*, can also be used as an adverb signifying 'afterwards'; similarly the postposition *birlä* 'with', which then has the meaning 'together'. The internal structure of *kuvrag yïgïlmïšta ken* is that of a postpositional phrase; as shown by the translation 'after the congregation assembles', it can, however, also be considered a clause equivalent: Thus if *-mIštA ken* is classified as a complex gerund suffix; adjunct clauses are discussed in section 4.63 below. The two sentences we looked at show

[583] 'Interceding for each other' is *ara kiriš-*, to be bracketed as *(ara kir-)-iš-*. All these phrases are documented in UW 171a under *ara* (I) § A,c.

a variety of adjunct phrases and some of the uses to which they are put; they also reveal some of the definition problems to be encountered in trying to describe them.

Many elements have a number of syntactic functions. *aďïn* 'different', below presented as a postposition, could also be regarded as an adjective in all its uses, since its government of nouns follows from its content. The postposition *öŋi* is also used adnominally, in the meaning 'various'; *[isig] özün[güz]lärni* (?) *öŋi kapïp eltgäy* (U III 14,4) 'he will snatch away your lives' shows *öŋi* in adverbial use. *basa basa* is used adverbially, and then signifies 'gradually' or (in MaitrH XV Nachtr 1r14) 'continuously'. The overlap between postpositions and relational nouns, which also exists, is documented in section 4.22. Some elements have all three functions, e.g. *ara* discussed above or *tägrä* 'around': *tägrä tolï* is used adverbially in expressions such as *tägrä tolï tägzinür* (Xw 48) 'they revolve round and round' or *tägrä tolï tururlar ärdilär* (KP 71,4) 'They were standing round him'; there is an adverbial *tägrä* in *yagïmïz tägrä očok täg ärti* (Tuñ 8) 'Our enemies were all around (us) like an oven (and we were in the middle like food)'. Instances of the bare stem *tägrä* governing nominals in the nominative are mentioned below; finally we have *tägrä* as auxiliary nominal, e.g. in *täŋri burxan tägräsindä* (TT X 349-50). The only thing *tägrä* apparently cannot do is to be used adnominally; for that it receives the converter *+kI*, as in *känt tägräki bodun bokun* (TT X 51) 'the population in the town's suburbs' or, with zero government as in the Tuñ example just quoted, *tägräki tapïgčïlar* (U II 22,2) 'the servants surrounding (her)'. In *tägräki birlä yüküntäčilär* (Ht III 942) 'those praying with (him) who were around (him)' both *tägrä* and *birlä* get the same governed entity from the context.

Adjunct clauses are, in section 4.63, classified according to meaning. We could have done this also with adjunct phrases and dealt with phrases referring to place, time, circumstance, manner, comparison, aim, participant structure, source or means. Had we done that, we would (as done with the clauses) have had to mention elements such as *tägrä* 'around; concerning' or *üzä* 'above' vs. agentive 'by' under more than one heading: one meaning local, the other abstract.

4.21. Postposition constructions

Adjunct phrases are often construed around postpositions (equivalent to prepositions of some other languages but following the nominals which they govern), a limited set of elements which govern nominals though

they are not verbs.[584] I have called nouns which similarly form adjunct phrases by governing noun phrases relational nouns; these are dealt with in the next section. Proper postpositions are much more similar to adverbs than to nominals in lacking inflexion; when not governing noun phrases they function as adverbs.

Postpositional constructions normally qualify verbs; they can, however, also qualify adjectives or nouns: In *kök kalïk birlä täŋ tüz* (UigTot 1378) 'equal to the sky' a postpositional phrase is governed by an adjectival binome, as English *equal* governs a prepositional phrase in the translation. In *maŋa täŋlig kiši* 'a person like me' (TT X 499) a postpositional phrase qualifies a noun. Another difference between these two expressions is that *täŋ tüz* opens a slot for a *birlä* phrase in the same sense that the cooperative-reciprocal opens a slot for a *birlä* phrase.

Most of the postpositions govern the nominative (i.e. stem) form of nominals. These are *täg* 'like, as',[585] *birlä* 'with' (e.g. *Xormuzta täŋri beš täŋri birlä ... kälti* 'The god Ohrmizd came with the fivefold god' in Xw 2; inscriptional *tatar birlä tokï-* 'to clash with the Mongols'), *üčün* 'for; because of' (e.g. *nä üčün* 'why; what for', *bursaŋ kuvrag üčün* 'for the congregation' in Maitr 71v27),[586] *utru* (e.g. *Xilimbï yäk utru bardï* 'He advanced against the demon Hiḍimba' in U II 26,17), *töni* 'during' (examples in Zieme 1992) and *tapa* 'towards' (e.g. *täŋri elig tapa* 'towards the divine ruler' in M III nr.27 r1). Very many examples of *ara* 'between, among, mutual' are listed and partly quoted in UW 170-172, which we therefore need not do here. *ikin ara* is in fact often used as *ara* by itself, e.g. in *yig aš ornï bïšag [a]š ornï ikin ara* 'between the place of raw food and of digested food' (MaitrH XV Nachtr 4r24) or *iki*

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[584] Old Turkic postpositions do not govern adverbs or adverb equivalents; 'as before' is therefore *öŋräki täg* (BT XIII 8,10-12), not *'öŋrä täg'*.

[585] And its Oguz counterpart *kepi* mentioned in the DLT (fol.471 *korum kepi* 'like a boulder', 243 *kušlar kepi* 'like birds' etc.), < *kep* 'mould' + possessive suffix.

[586] Gabain 1974: 142 (§301) quotes *"barïmïγ üčün"* from Radloff's edition of the Yenisey inscriptions; Radloff had transcribed this as *barmaγ üčün* (with an A which he did not transcribe following the word *üčün*). The passage occurs in E11,3, with Vasil'ev 1983: 20 emending away the g^1 (presumably because he was aware that *üčün* does not govern nouns without possessive suffix in the accusative form): Both Kormušin 1997: 273 and Kurt Wulff in his unpublished edition of this inscription read $b^1r^1mg^1$ ẅčt^{2}ẅ $y^1I^1 1k^1I$ t^2ẅk^2t^2I; I accept this especially since the two readings are independent of each other. Understanding the passage is more difficult. Kormušin takes *tü* to signify 'kind' (this meaning being attested several times in Qarakhanid) and thinks that *üč tü yïlkï* are three kinds of livestock – horses, cows and sheep. He may be nearly right: The phrase may refer to pack, riding and draught animals such as camels, horses and donkeys (cows and sheep are not *yïlkï*). *üčün*, at any rate, must here be a misreading.

ämigi ikin ara 'between her two breasts' (Maitr 33r21). *tägrä* is used as a postposition, e.g. in *känt tägräki bodun bokun* (TT X 51-2) 'the people around the town': We find the phrase *ätözüŋ tägrä körsär* used in parallel with *ig tapa körsär* in TT I 219-220, signifying 'if you examine (the oracle) concerning your body' and 'concerning an illness' respectively; i.e. with the same meaning as *tapa*. *yokaru* is normally an adverb, but in TT V A 4-11 we find it to govern nouns in the nominative: *tiz yokaru belkä t(ä)gi suv ulug titir ... bel yokaru köküz äginkä tägi ot ulug tetir ... ägin yokaru sač kïdïgka tägi yel ulug tetir* 'From the knee upwards till the waist (the element) water is said to dominate... From the waist up till the breast and the shoulder fire is said to dominate ... From the shoulder upward till the edge of the hair (the element) wind is considered to dominate'. In *t(a)mudan yokaru agdokta* (M I 13,15) 'when they rose up from hell' *yokaru* can be considered an adverb. *art-ok* 'more' can, already in Orkhon Turkic, govern the nominative of quantitative terms: *yarïkïnta yalmasïnta yüz artok okun urtï* (KT E33) '(They) hit him by his armour and his cloak with more than a hundred arrows'. Similarly in Uygur *sïruklar kamag m[ï]ŋ beš yüz artok, tawčaŋlar [ku]žatrïlar üč yüz artok; ... ičtirtin ünmiš ... iki yüz artok burxan[la]r ...* (Ht VII 1111-1114) 'The ... poles were all in all more than 1500, the sedan chairs and tents more than 300; more than 200 ... Buddha (figures) which had appeared from inside ...' or *bir ay artok ačïntï* (KP 68,2) 'They took care of him for more than a month'. *bir tsun artok* (Ht III 975) is 'more than an inch'. Normally *artok* is an adverb governing the ablatival locative or (e.g. in BT VIII 143) the ablative.

eyin 'as a result of; according to' can govern two different case forms with no apparent difference in meaning: We have the nominative in the Manichæan ms. U 122a v4 (edited in Zieme 1969: 198) and TT II,2 26, 27, 35, 46 and 82 (e.g. *öpkä bilig eyin* 'as a result of wrath') and in Buddhist *üd eyin* (Suv 596,22), *ayïg törö eyin ävril-* (U III 79,4), or *täŋri burxan eyin bar-* (TT VIII A 17) 'to follow the divine Buddha'; the phrase *köŋül eyin* 'to one's heart's desire' is especially common. However, it governs the dative in *nizvanïlarka eyin* (Pothi 203, also Manichæan but later), *bo yörügkä eyin bol-* (Ht I 188) 'to accord with this view', *ayïg öglilärkä eyin bol-* (Suv 101,18) and e.g. in TT VIII A 16, 46, ETŞ 13,24 and 16,43. In TT VI 196 one ms. has *ayïg kïlïnč eyin bar-* where another writes *kïlïnčka* instead.

kudï governs the nominative in *säläŋä kudï* 'down the Selenga (river)' in BQ E37 and ŠU E4, but the locative or (more often) the ablative in the rest of Old Turkic. *kudï* comes from *kud-* 'to pour' because liquids

move downwards, including the river mentioned in this example. The contexts in question thus show the word in its original function, and we do not know whether it retained its government of the nominative once its use was extended to cover downward movement in general.

täg is the postposition which has the closest juncture with the nouns it governs: It is often spelled together with them (see examples below) and even becomes a case suffix with some pronouns (governing the oblique stem and not the accusative form and following synharmonism). *täg* and *üčün* are never used as adverbs nor as relational nouns, and there are some indications that *üčün* may (like *täg*) have had phonically close juncture with what it governs in some Yenisey inscriptions.

There are four postpositions formed with *+lXg* which do not yet appear in inscriptional or in Manichæan Turkic: *täŋlig* appears to be exclusively Buddhist while *osoglug*, *yaŋlïg* and *tägimlig* are in addition found in Qarakhanid Turkic. *täŋlig*, which generally governs the equative, and *tägimlig*, which governs the dative, are dealt with below. *osoglug* and *yaŋlïg* govern the nominative, e.g. *taloy ögüz osoglug* 'similar to the sea'; *siŋirgälir osoglug kälïn-* in U I 41, 'to behave as if one were to swallow somebody', *nä yaŋlïg* 'in what way' both in Uygur (e.g. TT VIII A2) and Qarakhanid. What is peculiar about *osoglug* and *yaŋlïg* is that they also govern the pronominal forms formed with the postposition-turned-case-suffix *+tAg*, e.g. *montag yaŋlïg* 'in this way' frequently in the Suv or in BT XIII 13,111, *mondag osoglug* (TT VIII A37) or *nätäg osoglug* (U III 57,6_1). Being practically synonymous with *täg*, *osoglug* and *yaŋlïg* may have come up to strengthen the meaning of *täg* and to make it more explicit. Similarly *täŋlig* appears to have emerged because of the need to make quantitative *+čA* more explicit and focussed.

When the postpositions mentioned hitherto govern demonstrative or personal pronouns or the pronoun *käm/kim* 'who', the governed pronoun appears in the accusative form, e.g. *munï täg* 'like this' (Pothi 104) *bizni täg* (common) 'like us', *bizni ara* (M I 10,2), *sizni birlä* 'with you' (TT II,1 1) or *kimni üzä* 'over whom' (M III 22,11_2, nr.8). *sini üčün* (Maitr 77v5) and *sizni üčün* (M III nr.7 I v2, nr.18 v15) 'for you', *anï üčün* 'therefore' (a number of times). We have *olarnï üzä* in ms. U 274 v9[587] and *olarnï birlä* in Ht III 388 but *olar ara* in M III nr.32 r5.

The postposition *ara* governs the genitive in *olarnïŋ ara* 'among them' (MaitrH XXI 3v5, XXIII 12r6), though it otherwise governs the

[587] r8 according to WilkKatMan nr. 237.

accusative of pronouns. This may have come up in analogy to the relational noun constructions, where the genitive is the only admissible case for pronouns. Remember that *ara* is originally a noun and that it was also used as relational noun. The demonstrative pronoun appears in the genitive also in the common phrase *anïŋ ara* 'in the meantime' (in MaitrH XX 1v3 and elsewhere). In Qarakhanid Turkic the accusative is replaced by the genitive altogether, e.g. in *mäniŋ tapa* 'towards me', *anïŋ birlä* 'with him', *anïŋ kepi* 'like him' (DLT). This development is echoed by the genitive being used also as alternative oblique base in those sources, as e.g. *säniŋdä*, *anïŋdïn* or even *säniŋsiz*. Cf. also already *anïŋ utru turdačï yok* (U IV A283) 'There is no one to stand against him'.

The same postpositions governing the accusative forms of pronouns also govern the accusative of nominals with 2nd or 3rd person possessive suffix, as *elin ičrä* 'in their realm' (M III 19,15), *käntü köŋülin ičrä tarï-* 'to plant into their own hearts' (M III nr.8 VII r3);[588] *ordolarïn ičrä* 'in their palaces' (Ms. U 267a I r1-4 quoted in the n. to BT V 214); *özintäg, ortosïntäg, oronïntäg* and *olorgusïntäg* (spelled thus in BT V 175-6), *yarokïn täg* (M II 8,13); *bir äki atlïg yavlakïn üčün* 'because one or two knights were wicked' or *antagïŋïn üčün* (KT S8 = BQ N6) 'because you are like that', *armakčïsïn üčün* (KT E6), *tömgäsin üčün* 'even though they are foolish' (Maitr 2r2),[589] *yerin tapa* 'in the direction of his place' (ŠU S6), *käntü ätözin üzä* (M III nr.8V r4) 'by his own body', *zrušč burxan töpösin üzä* (ManUigFrag v3) 'on the head of the prophet Zarathustra', *kamaguŋuznï üzä* 'over all of you' (M III nr.27 r18; for a long time misread), *otïn birlä* 'with their herbs' (M I 15,6-7), *täŋrilär arïgïn utru* 'before the purity of the gods' (quoted in Zieme 1969: 127), *ay täŋri künin sayu* 'on every Monday (< moon day)' (Xw 183).[590] The very common phrase *äkin* / *ikin ara* 'between the two' appears to follow the same structure although the second syllable of 'two' is not the possessive suffix synchronically; see UW 171-3 for examples. *yüzün utru* in M III nr. 8 VII v9 is an exception, as

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[588] The same phrase with *ičrä* should be read also in nr.8 IV r15, where the editor writes *köngülin [a]ra tik- tarï-*.

[589] Replaced in the (linguistically) later Hami ms. (Yükünč 11a6) by *tömgäsi üčün*; cf. Laut 1986: 49 n.2.

[590] Gabain (1974: 135 and elsewhere) thought that the accusative in these phrases came from the fact that so many of the postpositions originally were converbs (as e.g. the last one mentioned). Another explanation would be that the form was in fact an oblique stem, as found also in a part of the pronouns before some case suffixes. On the other hand, the process may also have originated among the postpositions, as some of those case suffixes may hypothetically have originally been postpositions.

one would expect **yüzin*. Doerfer 1992 takes this single exception (which stands beside a huge number of cases where the suffix is a normal accusative), the phrase *äkin* / *ikin ara,* the form *sizintäg* 'like you' in ChristManManus Manichæan ms. r 10[591] and plural personal pronouns which have an intercalary *+Xn+* in oblique cases as indicating that there was an oblique stem beside an accusative. This is possible but not certain.

In Uygur it often happens that nominals with 2nd or 3rd person possessive suffix are in the nominative and not the accusative form when governed by postpositions, but in Manichæan texts these instances are a tiny minority: *kälän käyik muyuzï täg* 'like the unicorn's horn' (T I 105); *töpösi üzä* 'with his head' (U II), *täŋri elig kutï birlä* (Ht VIII 25) 'with his divine majesty the king', *bo montag üküš ädgülärniŋ kapïgï üčün* (Ht VIII 46) 'because it is the gate to this much good', *oglï üčün* (KP 8,5) 'for his son', *yi]nčü tizigi täg* (TT X 450) 'like a row of pearls'. *tašïg özi üzä tutsar* 'if one keeps the stone on oneself' even appears in a runiform ms., BlattRun 17. In E32 I Vasil'ev's text can be read as *är ärdämi üčün* (as done by Doerfer 1992: 99) and this is also what Thomsen and Wulff have.[592] The Manichæan ms. M III nr.15 has two instances of this type: *yarlïkamïšï üčün* 'because he ordained' in r 2 and *eligimiz kutï üzä* 'over his majesty our king' in v 23;[593] the phrases *buyan tüši üzä* and *tiliŋiz üzä* appear in a late Manichæan text, in Pothi 376 and Pothi 108 respectively. *ätözüŋ tägrä* 'concerning your body' appears in TT I 219, a late text.[594] In Suv 18,21 *tägrä* appears to govern the nominative of a pronoun: *ol nom ärdini bo tägrä adïn yertä yok* 'That valuable book is not found anywhere else around here'.

Nouns with 1st person possessive suffixes do not have the accusative suffix; e.g. *olortokum üčün* (BQ E 36) 'as I reigned', *yavašïm birlä* (M II 8,16) 'with my gentle one', *öz kazgančïm üzä* (KP 12,2) 'with my own earnings' or *yüzümüz utru* (TT II,1 6) 'before our face'.

When a genitive of any nominal gets nominalised, it stays in the genitive form when getting governed by a postposition, e.g.: *agïr ayïg kilïnčlarïm olarnïŋ täg arïzun alkïnzun* (Suv 139,13) 'May my grave

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591 This form presumably came about because *täg* was in the process of becoming a case suffix since the Orkhon inscriptions; cf. *antag*, *montag*, *bintägi* etc.

592 Kormušin 1997: 115 (l.5) was unable to see this.

593 In both cases the possessive sufix is spelled with two *yod*s, but this is a text in Manichæan writing, where *alef* and *yod* are not at all similar.

594 *küvrügüni täg* (TT VIII G70) does not have an aberrant accusative of the possessive suffix but should be read as *küvrüg üni täg* 'like the sound of a drum'.

sins get purified and annihilated like theirs (i.e. the *bodhisattvas*'). This is not to be confused with the genitive replacing the accusative of pronominal forms without semantic justification.

Few postpositions govern the accusative of nouns. Gabain 1974 § 278 lists *käčä* '(in) crossing', which governs the names of rivers in the accusative in KT and BQ, among the postpositions; there is no reason to take this converb to be petrified, however, and its use and meaning in no way differs from what a converb of *käč-* should have. *tuta* 'concerning' does, however, appear to differ in meaning from what would be a converb of *tut-* 'to hold' and may therefore have become a postposition: *munda kirligig tuta sözlämiš ol, kirsizig tuta ärmäz* (Abhi A 30a7) 'This has here been said concerning the polluted, not concerning the pure'; *näčä adïn oronta yarlïkasar ymä ... vaynikïlïg tïnlïglarïg tuta ärür; bo yörügüg tuta ärmäz* (Abhi B 98b7) 'Even if one preaches elsewhere, this is (done) with respect to converted creatures, not with respect to the present interpretation'. Abhi being a very late text, the emergence of a postposition governing the accusative may be a late development.

tägi 'till, all the way to' governs the dative; it is often spelled together with the word preceding it, as in *täŋri yeriŋätägi* 'all the way to the land of the gods'. It does not necessarily imply physical movement: *siŋiri tamïrï süŋükiŋä tägi közünüp ärtiŋü turuk bolup* ... 'his muscles and veins were visible right down to his bones and (he) had become exceedingly lean' (U III 35,20). *ogšatï* 'similar to', a petrified converb derived from *ogša-* 'to resemble' which is common in Buddhist texts, could also be a postposition: In *täŋridäm yaŋa[nïn]g tumšukïŋa ogšatï ... säviglig körtlä iki kolïn bäk tutup* (U III 24,9) 'holding fast his two … lovely and beautiful arms, which resemble the trunk of the divine elephant', e.g., it would be a synonym of *täg* or *osoglug*. *yarašï*, e.g. *igiŋä yarašï nom örüntäg* (MaitrH Y 268) 'a religious medicine suitable to their illness' or *köŋülkä yarašï oron* (BT VII A361) 'a place suitable for the soul', can also be considered a postposition. Similarly *tägimlig* 'worthy of', which also governs the dative: Its first part is a semantically not very transparent *-(X)m* derivate from *täg-* 'to reach'. *eyin* governs the dative beside the nominative; examples are given above.

utru governs the nominative beside being commonly used as an adverb. In *elig bägkä utru yorïyu kälti* (U III 63,6-7) 'He came walking towards the king' it may be governing the dative; *elig bägkä* is less likely to have been governed by *käl-*.

The local and temporal postpositions *üzä* 'over; by', *öŋrä* 'before' and *ičrä* 'in, into' can govern both the nominative and the locative: e.g. in *muntada öŋrä* 'before this' (U IV A 263) and *ävi on kün öŋrä ürküp barmiš* 'Their households are said to have fled ten days earlier'; *kiši oglïnda üzä* (Orkhon Turkic); *barčada üzäräk* (BT V 171, with the comparative suffix) 'higher than everything (else)' and *on uygur ... üzä ... olorup* 'ruling over the O.U. ...'. The phrase *suv ičrä* appears both in M I 17,14 and 35,17 but signifies 'in' in the first and 'into' in the second passage: *balak suv ičrä yüzärčä* 'as (a) fish swim(s) in the water' vs. *kuyk[a]sïn ... suv ičrä kämišmišlär* 'they threw its skin into the water'.[595] In *iki yarok ordo ičrä olorugma* 'residing in the two palaces of light' (Xw 52) it is the former, in *sagïr ičrä älik keyik kirmiš* (IrqB 63) 'a roe deer entered the ring of beaters' the latter. Then we have *ičrä* governing the locative, in *anta ičrä* (M III nr.4 v16) 'inside that'. *asra*, another *+rA* form, is not attested with the locative; with the nominative we have it in what appears to be a lexicalised phrase: We have *adak asra kïl-* 'to subdue' and *adak asra bol-* 'to be subdued' (see both in UW 235a, § B of the entry for *asra*). See section 4.1107 for other syntactic functions of *+rA* forms. Some *+dXn* forms govern either the locative, e.g. *kuvragta taštïn* 'outside the congregation' (Ht III 802), *iki yašda altïn* 'under two years of age' (U I 10, Magier), *käyrädä öŋdün* 'east of Käyrä', or the nominative: *säläŋä kedin* 'west of the Selenga (river)' (inscriptional), *balïk taštïn* 'outside the town' (KP 1,2), *öŋi öŋi sögüt altïn* (Udayana 30) 'under different trees'.

tašra and *taštïn*, both 'outside', *kesrä* and *basa*, both 'after', and *körö* 'compared to, with respect to' are attested with the locative case: *kop ädgüdä ičrä, kamag ayïgda tašra ärzünlär* (MaitrH Y 33) 'May they partake of all good and be free of all evil'; *bir braman [ol] kuvragta taštïn turup ...* (Ht III 801) 'a brahman was standing outside (that) company and ...'.. *kesrä* appears not to have been used outside the runiform inscriptions, e.g. *anta kesrä* in Tuñ 6, KT, ŠU N 10-12, and (rarely) the Manichæan sources, e.g. *antada kesrä* 'after that' in Xw 138. *basa*, which became a postposition only in Uygur, appears in the very common phrase *anta ~ antada basa* 'thereupon' and in *munta basa* 'hereupon' (BT II 154 and 914, once in Suv) or *montag tep yarlïkamïšda basa* (Suv 463,11) 'after having preached with these words' *olar burxan kutïn bulup ärtmištä basa anta ken* (BT II 1330)

[595] The locative case is used for motion *towards* a goal beside denoting lack of movement when this motion results in the moving object staying in its destination; similarly, the use of *ičrä* with movement may have been licensed when the result was a static situation.

'after they will have reached Budhahood, afterwards, ...'. *körö* appears in proverbs: *altun sarïgïta körö ešič karasï yeg; yürüŋ*[596] *kümüšdä körö ayak tolosï yeg* (HamTouHou 16,13-14) 'Better than yellow gold is that the pot should be black; better than white silver is that the bowl should be full' and *äšidmištä körö körmiš yeg* (ThS III a3) 'To have seen (something) is better than to have heard (about it)'; it is also attested in the DLT. The (petrified converb and) adverb *ašnu* 'previous(ly)' also governs the locative when used as postposition, e.g. *üküš ažunta ašnu* (HamTouHou 1,13) 'many existences earlier'; further examples of this are mentioned in UW 243b under *ašnu* § C.

Normally, postpositions which govern the locative in ablative or separative meaning are also (at least occasionally) attested with the ablative. The reason that this does not happen with the three postpositions mentioned last is that *kesrä* appears only in texts where the ablative is exceedingly rare, *öŋrä* is normally an adverb and is hardly ever attested as postposition and *basa* (beside its adverbial functions) normally appears with the pronouns *anta* or *munta*.

One of the postpositions governing both the locative and the ablative is *adïn* 'other than', which is documented in its ablatival function in UW 50a (lower half) for Uygur. It is often used together with *öŋi* 'distinct, different from; except', e.g. in *muntada adïn takï öŋi aš ičgü yok* (Suv 610,16) 'There is no other or different food than this'. For *öŋi* cf. further *küntä ayda öŋi* (Xw 64) 'other than sun and moon'; *isig özlärintä öŋi üdürdüm* 'I separated them from their lives' and *nomta öŋi* 'except by the doctrine'. The ablative itself can also get governed by *öŋi*, e.g. in *isig özlärintin öŋi adïrtïm* (Suv 135,17).[597] With these instances we should raise the question as to whether *öŋi* is not phraseologically related to the verb in such a way that the *+dIn* forms are not governed by *öŋi* by itself but rather by the verb phrases *öŋi üdür-* and *öŋi adïr-*; the answer is probably negative. *öŋi* governs numerals (discussed in section 3.14) in the nominative. *ötgürü* 'because of' has the same government pattern (except the feature of *öŋi* mentioned last): *övkälärintä ötgürü* (U IV A 34) 'because of their anger' or *nägüdä ötgürü* (U II 5,14) 'for what reasons?'. With the ablative: *k]ertgünčintin ötgürü* (Pothi 374) 'because of their faith'; *bo*

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[596] Spelled as YWRWK, as a spelling characteristic; not very likely to have been pronounced as *yürüg* although the loss of the pronominal *n* in *sarïg+ï+ta* (spelled SRXYT') does make that a possibility.

[597] The phrase in *antïn öŋi yolča* in (U I 9,7) could perhaps also be read as *adïn öŋi*, a common binome to be read also on l.14 of the same page in reference to the same circumstances, also with T for /d/ under voice confusion.

üčägünüŋ kavïšmakïnďïn ötgürü (Suv 52,19) 'because of the conjunction of these three', *küčlüg tärïŋ kertgünč köŋüllärindin ötgürü* 'because of their strong and deep faith' (ShōAv 112).

Most postpositions which (at least in part determined by dialect and historical development) can govern either the locative or the ablative have temporal meaning: Of *bärü* 'since; from ... on' we have the locative in *antada bärü, antadata bärü* and *ančada bärü* 'since then' or e.g. in *üküš üdtä bärü* (M I 11,17-18) but the ablative in *bolmïšďïn bärü* (ms. U 130a v6 in WilkKatMan nr. 557); *-mIšdA bärü* is attested very well; cf. section 4.633. The sentence *baštïn bärü atakka tägi okïtïm* (thus instead of *adakka* and *okïďïm*) 'I have read it from beginning to end' is a very late reader's addition to a Manichæan text in M I 30,24. *ötrö* 'after, following' mostly governs the locative: *uktokta ötrö* 'after having understood' (MaitrH XV 5v21) or *anda ötrö* 'thereupon' (Tuñ 16); *nädä ötrö* (M III nr.6 II v 13) signifies 'why?'. It is also attested with the ablative, however, in *beš törlüg savdan ötrö* 'as a result of five types of things' (M III nr.8 V r7-8). We have found ablatival instances even for *ken* 'after', which is practically always (and very often) attested with the locative: There is *anďïn ken* 'thereupon' in TT VII 28,47, *tïdmaktïn ken tugdačï nomlarïg* 'after restraining the principles which will emerge' in Abhi 3597 and 3598. Examples with the locative are *mintä ken* (M I 29,16; 30,17) 'after me', *anta ken* (TT II,1 30 and elsewhere) 'thereafter', *tör[t] burxanlarta ken* (Pothi 66) 'after the four prophets' or *yïgïlmïšta ken* (MaitrH XX 1r10) 'after having assembled'. *ïnaru* is attested with the locative e.g. in *muntada ïnaru* 'from now on' (M III nr.9 II r9), *bo kündä ïnaru* 'from this day on' (U III 65,2-3$_2$ and a number of times elsewhere) but with the ablative in *säkizinč orontïn ïnaru burxan kutïn bulgïnčaka tägi* (Suv 237,18) 'from the eighth position on till one reaches buddhahood'.

The only local postposition which is used both with the locative and the ablative forms (with no apparent semantic difference between the two) appears to be *kuďï* 'down (from)': We have it with the locative in *kök täŋridä kuďï* (M III nr.15 r10) 'down from the blue sky' but with the ablative in *kalïkdan kuďï* (M III nr.8 VIII v6-7) 'down from heavens', *üstüntän kuďï* (M III nr.8 v10) 'down from above' and *oronlukďïn kuďï* 'down from the throne' (KP 61,5-6). Above we quoted inscriptional examples for *kuďï* governing the nominative.

ulatï 'others in addition to; etc.; including' governs the locative or the nominative. The head for postpositional phrases formed with this element is the name of a set; what it governs are one or more members of this set. When the governed phrase(s) is / are in the locative, they are

members of the phrase as it is conceived but not as it is named; here an example to clarify what I mean: *bir kiši ölüt ölürmäktä ulatï tokuz karmaputlarïg ... ärtsär* (text quoted in the n. to TT IV A 11) 'If a person commits murder and the other nine sins'; if the phrase had been in the nominative we would have found the number ten and not the number nine, as the first one would have been presented as being included in the referent of the head: In Buddhism there are ten sins. Cf. further *tilkü böritä ulatï yavïz tïnlïglar butarlayu tartïp ...* (U III 79,1) 'fox, wolf and other evil creatures tear it to shreds'. *üztä buzta ulatï üküš tälim nizvanïlar* (Pothi 33) 'hate and the other numerous passions' and *azta ulatï nizvanï* (TT IX 22) 'greed and the other passions' are Manichæan examples for this construction. *ulatï* can also govern the nominative, e.g. in *az ulatï nizvanïlïg ayïglar* (U III 88,4) 'lust and the other evils of passion'. This is practically identical in content to the last example mentioned with a locative, but there is a difference: In runiform *atï öz apa totok ulatï kamïg atlïg yüzlüg otuz är* 'thirty (of us), all men of renown, the (ruler's) nephew Ö. A. *totok* and the others' (4th Stein ms., l.6), the overall number of men was 30, the head referring to the whole group including the set member(s) mentioned. Other such examples are *bars irpiš böri ulatï yavlak tïnlïglar alku täzärlär* (TT VI 116) 'Evil creatures such as tiger, panther and wolf will all flee', *bušï ulatï altï paramït* (HamTouHou 1,5) 'the six virtues including almsgiving' or *ötrö yay kïš ulatï tört üd adrïlur* (TT VI 324 Var.) 'Then the four seasons including summer and winter separate'; one could also write 'the four seasons, i.e. summer, winter etc.'. Functionally, *ulatï* is a marker serving the configuration of noun phrases (cf. section 4.12).[598]

bašlap, originally a converb of *bašla-* 'to head', is in Suv (e.g. 5,8 and 6,12 quoted elsewhere) used in similar adnominal fashion.

sïŋar 'side' signifies 'in the direction of' when it serves as postposition.[599] It appears to govern the directional *+dXn* form or, less likely, the ablative. We find it throughout Old Turkic: *beridin sïŋar* 'in the south' ŠU E 3 (runiform inscription) and BT V 193, *künbatsïkdïn sïŋar* (BT V 195); *küntugsukdan sïŋar* (BT V 195); *kün ortod(u)n sïŋar; ïrdïn sïŋar; yïrd(ï)n sïŋarkï yel; kün ortodun sïŋar; bïrgarudun sïŋar* 'from the west; to the east; from the south; to the north; the northern wind; to the south; in the south' M III 9,4-0,15 (Manichaean),

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[598] See Moerlose 1986 for a good account of the meanings and functions of *ulatï*.

[599] *sïŋar* is used in BQ E 2 in a sentence where the EDPT translates it as 'wing (of an army)'. It can later refer to 'one of a pair', and also signify 'half'. This and the uses as postposition can be considered to belong to the same lexeme. In South Siberian Turkic *sïŋar* went through a process of grammaticalization and became a case suffix.

koptïn sïŋar 'in all directions' Pothi 60 and U III 29,2; *kayutïn sïŋar ... antïn sïŋar* U II 29,19-21 (Buddhist), *ontun sïŋar* 'in ten directions' in Ht VI 1528 etc. We also find it with *ič+tin* (TT VII and X) and *taš+dïn* (TT IX 90 and TT X), *iki+din, tört+tin, tokuz* (thus) and *on+tïn*. It governs the locative form in *kün ortoda sïŋar* (M III 10,8) and the nominative in *on sïŋarkï burxanlar* (TT VIII). *yïŋak* 'point of the compass, direction' also serves as postposition governing this same form; examples for both the nominal and postpositional use are mentioned in section 4.2. The EDPT quotes examples for the expressions *öŋtün*, *tagtïn* and *kedin yïŋak*, signifying 'eastwards', 'northwards' and 'westwards' respectively. In *täŋri burxannïŋ oŋtun yïŋak turdï* 'he stood ... on the right hand side of the divine Buddha' (TT X 158 as completed by Zieme in his 'Nachlese') we see that *yïŋak* does not get a possessive suffix even if the phrase is qualified by a genitive.

täŋlig 'as much as' (= Turkish *kadar* with nominative) governs the equative of measure; the most common instances are pronominal: *näčä täŋlig* 'how much' (U III 73,2, TT X 345, several times in Suv etc.), *munča täŋlig* 'this much' (Suv 419,7) and *ïnča täŋlig* (Suv 351,16) and *anča täŋlig* (Suv 155,22, 176,6) 'that much'. Further, *bir padakča täŋlig nom* 'as (little as) a single verse from the doctrine' (U III 29,16).[600]

Postpositions can have abstract (e.g. *üčün* 'for', *täg* 'like', *osoglug* 'similar to') or concrete (e.g. *kudï* 'down', *tapa* 'towards') meanings. Postpositions in abstract use are found to govern not only noun phrases but also clauses (causal and final clauses *üčün*, comparative clauses *täg* and *osoglug*). When governing just nominals and not clauses, *üčün* usually signifies 'for'; not, however, in the Xw: *azu muŋ üčün, azu bušï bergäli kïzganïp yeti türlüg bušï nomka tükäti berü umaďïmïz ärsär* (Xw 168) 'if we were unable to fully give seven types of alms to religion whether *because of* distress (*muŋ üčün*) or because we were too stingy to give'; *üzä on kat kök asra säkiz kat yer beš täŋri üčün turur* (Xw 77) 'The ten levels of heavens and the eight levels of earth subsist *thanks to* / *through* the Fivefold God'.

täg is practically synonymous with some of the uses of *+čA*: In TT VI 336-9 we find *kiši ät'özin buluglï antag ol kaltï türŋak üzäki tuprak täg; üč yavlak yolka tüšügli anča ol kaltï bo yertäki tuprakča; ... kertgünč köŋüllüg tïnlïglar anča ol kaltï türŋak üzäki tuprakča* 'Those who acquire a human body are e.g. like (*täg*) soil on one's nail; those who

[600] *m[aŋa] täŋlig kiši* cannot be reconstructed in TT X 499 as *täŋlig* does not govern the dative.

fall into the three evil ways are e.g. like (*+čA*) the soil in this earth; ... creatures with faith are e.g. like (*+čA*) soil on one's nail ...'.

Some postpositions, like *üzä* or *tägrä*, have both concrete and abstract meaning: *tägrä* means either 'around' or 'concerning' (like English 'about'). *üzä* can signify 'over, on' (as in the sentence just quoted or some quoted above) but also governs noun phrases referring to instruments or aspects of activities or states (e.g. *öz kazgančïm üzä ädgü kïlïnč kïlayïn* 'I would like to do good deeds by my own merit' in KP 12,3 or *ün ägzig üzä yegädmiš* 'excellent through his voice' in BT II 511) and (in Uygur) to the agent in the passive (see OTWF 692-693).

sayu 'all' appears only in local expressions but deletes the case suffix of the noun phrase it governs; this is explained by etymology, the form presumably coming from the vowel converb of *sa-* 'to count': In *kay sayu bodun sayu* 'to every street and every tribe' or (Ht VIII 69) *buluŋ yïŋak sayu yaddïlar* 'they spread (the teachings) to the corners of the globe' the implicit case suffix is the dative; in *kalmïš süŋük yer sayu* (Suv 626,16-17) 'the bones remain everywhere' or *üküš ärüš bodun sayu* (Wettkampf 58) 'among very much of the public', the implied case is the locative: The verb governing the postpositional phrase disambiguates these contents.

There are two or perhaps three converb markers consisting of converb + postposition: There is *-U birlä*, which is a well attested analytical temporal converb suffix (cf. section 4.633; *-U* does not have specifically temporal content by itself), and we find a few instances of a sequence *-gAlI üčün*, where the meaning of the converb suffix and the postposition are in mutual support (cf. section 4.636). In the first case, *birlä* probably was an adverb also signifying 'at once', which did not govern the vowel converb; in *-gAlI üčün, üčün* disambiguates, as *-gAlI* can also signify 'since'. *turgïnča ara* in Höllen 21, 72 and 78 is likely to be contracted from *turgïnča ara* and to signify 'as long as they stay (in that hell)'; cf. *turgïnča ičin ara biliš-* 'to be acquainted with each other'. Here the postposition would again be strengthening the meaning already found in the converb form. In Abhi 1398-99 there is a similar construction (but with *ekin* between the two words).

täg can govern finite verb forms; e.g. *munuŋ tüšämiš tüllärin koduru kololasar mär otguratï ordog karšïg kodup tašgaru üngäy täg mär* (MaitrH XIII 4v7) 'If I deeply meditate on the dreams she dreamt, it looks as if I would definitely abandon the palace and go out', where I have translated the postposition as 'it looks as if'. See section 3.27 for epistemic content and historical connections of this verb phrase.

4.22. Relational noun constructions

Relational nouns are a set of nouns linked to the nominal they govern through an izafet construction, i.e. what I have dealt with as 'nominal phrase with possessive satellite' in section 4.121. Within such phrases relational nouns serve as head with possessive suffix; typically, they are in the locative case. In earlier Uygur, nouns governed within such constructions are in the nominative and not in the genitive case, as would have been equally possible if these were normal izafet constructions; governed pronouns, on the other hand, are in the genitive case. With nouns with possessive suffixes we appear to have both possibilities. Governed nominals can also be replaced with zero reference to the context, i.e. disappear; the stable mark of the construction is the possessive suffix added to the relational noun. A number of elements are both postpositions and relational nouns; they will be dealt with further on. Nouns which also serve as postpositions but do not appear in the izafet type of structure are here not classified as relational nouns; this is the case with *yïŋak* 'direction', which governs nouns in the *+dXn* form and does not need the possessive suffix to do so. We first give a list of relational nouns, with a few examples:

The concrete relational nouns denote relative placing or timing, used in the locative case form. Such are *ič* 'the inside' (e.g. *äv bark ičintä* 'in a house' TT II,1 42), *taštïn* 'the outside' (e.g. *sugčen taštïnïnta* ManBuchFrag p.148,5[2] 'outside Su-chen'), *öŋ* 'front; face' (e.g. *siziŋ öŋüŋüzdä* 'before you' M III 24,4$_4$ nr.9 II), *orto* 'middle' and *üsk* 'presence' (e.g. *maytri täŋri burxan üskintä* 'in the presence of the divine Buddha Maitreya' TT IV B48 or *mäniŋ üskümtä* 'in my presence' TT X 203); also others, which we mention below as they are also used as postpositions. *öŋ* 'face' and *baš* 'head' (*bašïnta* e.g. in Ht III 389) are examples for the use of names for body parts as relational nouns. *asra* 'below' appears to be used once, in a late text, as relational noun, in *asrasïnta agnalïm* (USp 177,8$_2$) 'let us writhe below him'; otherwise it is an adverb (used as a postposition in the phrase *adak asra* 'subdued, subjected'). *azusïnta* 'beside, on the side of' (documented in the UW entry for it) also has the shape of a relational noun; a noun *azu* is attested as *azu+kï* and *azu+ča* (both listed in the UW) and with the meaning 'from the side' in *azu+tïn tur-* (MaitrH Y 376).[601]

[601] The conjunction *azu* 'or' does not have quite the same meaning but a semantic bridge would be possible.

Then there are relational nouns in abstract use, as *yol+ïn+ta* 'concerning': *bo borluk yolïnta ... akam inim yegänim tagayïm ... čam čarïm kïlmazunlar* (SUK Sa11,13) 'May my brothers, nephews or uncles ... not raise any objections concerning this vineyard'. Similar instances of *yolïnta* appear in other contracts, in Sa16,12, 22,8 and 23,15, WP6,2, 4, 6, 7 and 31, Mi3,12 and Mi27,4. *bilir biz temiš yolïnta* (WP 6,31) is 'concerning it having been said "We are responsible"'.

All other relational nouns in abstract use express different views on causality; e.g. *ugur* 'time, simultaneity, sake' which governs the object of the agent's motive in *az nizvanï ugrïnta* 'for the sake of lust' (TT II,2 20) or *ogul ugrïnta* 'for the sake of a son' (MaitrH XI 3v16). Sometimes, e.g. *[samtso] ačarï ugrïnta* in Ht III 463, *ugrïnta* signifies 'concerning'. *ugrïŋa* with dative, not locative, has still a different meaning: *samtso ačarï tärkin tegin swö yaratmïš ugrïŋa sävinč ötüg bitig ïddï* (Ht VII 216) 'On the *occasion of* the crown prince having written a preface, the master *tripiṭaka* sent a letter of thanks'. Further *tïltag* 'cause', *tïltagïnta* signifying 'because of' (e.g. in Ht VIII 4-5), and *küč* 'force', *küčintä* signifying 'due to'; thus in *ädgü kïlïnč küčintä* (TT IX 96 and 102) 'thanks to good deeds' or *ünüš nomnuŋ küčintä* (ETŞ 17,11) 'due to the *dharma* of ascent'. *tüš* signifies 'fruit' but more often 'consequence'; *tüšintä* 'as a result of' appears to function as relational noun a number of times in Pothi.

How do we distinguish between relational nouns and ordinary nouns appearing in nominal phrases, as would be *kišiniŋ ävintä* 'in the man's house' or even in *kögmän irintä* 'north of the Sayan (range)'? The simplest case, when a noun is attested only in the relational noun construction, is quite rare: *üsk* appears to be an example for this. In general, the border is fuzzy and there will certainly be cases where scholars might disagree. The main criteria are meaning and distribution: *küč* 'force, power', e.g., does not have the same meaning and is not attested in the same contexts as *küčintä*, which expresses causality. Then there is the principle of the content of relational nouns being more general: 'inside', 'outside', 'before' etc. are more general than 'north', not to speak of 'house'. Any object has an 'inside' (and in fact many non-objects as well), but being in the 'north' is not a relevant information for many entities, and only persons can have a 'house'. Relational nouns express basic spatial or logical concepts and this fact reflects on their distribution and use. We do not wish to exclude the possibility that a relational noun can also be a 'normal' noun, as clearly happens with names for body parts or, in another way, the highly versatile lexeme *ara*: As Röhrborn points out in UW 170b,

ara is used as a noun in the phrase *iki kaš arasïnïŋ tušï* 'the place between the two eyebrows' in UigTot 668 and 679. That (quite late!) text (832) also has *arasï* appearing in the dative in *iki kaš kavïšïg arasïŋa tägip* 'reaching the place between the two eyebrows' and in the ablative in *altmïšar kolti lenxwanïŋ arasïntïn suvlar kudulup* (ETŞ 20,137) 'water pours from among 60 myriads of lotuses': In the vast majority of Old Turkic instances I have noticed, relational nouns appear in the locative.

Several postpositions are used as relational nouns as well, e.g. both *üzä+sin+tä* and *tägrä+sin+dä* in Höllen 35: *üzäsindä [ya]lïnlayu turur yogun tuluklar tägräsindä tokïp anïŋ ičindä batururlar* 'They knock *around him* with the thick cudgels[602] which keep flaming *above him* and they submerge him in it (i.e. in the ground with red-hot irons)'. We have explicit nominal government in *täŋri burxan tägräsintä* (TT X 349) 'around the divine Buddha'. The postposition *basa* appears as relational noun e.g. in *elig bäg basasïnda yorïyu* (U IV A141-2) 'walking after the king' or *täŋri burxan basasïnda* (TT X 142-3) 'after the divine buddha' and the postposition *utru* 'opposite, facing' also in *utruŋda ... käldi* 'came to meet you' (TT I 113). The meaning of the adverb *udu* is close to that of *basa*; we find it used as relational noun in *mini ymä siziŋ uduŋuzta eltü barzun* (U III 49,28) 'Let him take me along following you.' *kenindä* is often used adverbially to signify 'thereafter, in the end'. Numerous examples of *arasïnda* governing nouns (mostly in the nominative, rarely, e.g. in Suv 492,5, in the genitive) are quoted or mentioned in UW 172-173; one example is *könčiŋ atlïg bägniŋ kišisi ... igläp ... ögsüz yatdï. ögsüzi arasïnta laylag sözläp ...* (Suv 17,22) 'The wife of a gentleman called Xiancheng was ill ... and lay unconscious. Between her unconscious phases she spoke incoherently ...'. The use of *ara* as relational noun is likely to be secondary: This use is not found at all in such an extensive early Buddhist text as the Maitr, and not in inscriptional or Manichæan sources except perhaps in the late Pothi book as *aras[ïn]ta* (255).

Occasionally there is contamination between postpositions and relational nouns, as in *beš törlüg tïnlïglarnïŋ ät'özlärin ičintä* (BT V 221-2) 'within the bodies of the five classes of creatures', where *ät'özlärin* is in the accusative and not in the genitive or the nominative.

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[602] This is a mere conjecture; I take this to be a derivate from *tul-* 'to strike' from which another derivate, *tulum* 'weapon', is well attested in Qarakhanid Turkic (discussed in OTWF 293).

4.23. Supine constructions

Among the actionality and ability auxiliaries discussed in section 3.251 and 3.253, *är-, tur-, u-, bol-* and *kal-* can govern the *-gAlI* form. In this function (though not in the temporal function discussed in section 4.633) it can be called 'supine' as its uses correspond to those of the Latin supine I (*salutatum venire* 'to come to greet') and II (*horribile dictu* 'terrible to say'); this will be seen below. *-gAlI tur-* signifies 'to be about to (do something)', which appears to have been the meaning of *-gAlI är-* as well; *-gAlI kal-* is 'to be about to do the action but not to have done it as yet'. *-gAlI u-* and *-gAlI bol-* express ability and possibility respectively; these uses also have a lot to do with a future projection. In general, *-gAlI* sequences express future orientation, as in *-gAlI ugra-* 'to intend to do', while sequences with the other two converbs, e.g. *-U alk-* and *-(X)p alk-* 'to finish doing', *-(X)p kod-* and *-U tükät-* 'to do something exhaustively', describe how the subjects carry out their ongoing action. *katïglan-* (see next paragraph) and *tur-* are found with both the vowel and the *-gAlI* converb, in the first case referring to ongoing, in the second to projected action.

The pragmatic verbs *yarlïka-* and *ötün-* (discussed in section 5.3) are, in these functions used only with the vowel converb: *-U yarlïka-* is 'to deign to do, to graciously do', *-gAlI yarlïka-*, on the other hand, 'to order somebody to do'; *-U ötün-* 'to say respectfully', *-gAlI ötün-*, on the other hand, 'to beg somebody to do'. Examples for *-gAlI ay-* 'to tell to do' are given in UW 287b, §1d in the entry for *ay-*. Note that, in all these cases where a *-gAlI* form is followed by a verb of utterance, the two verbs have different subjects; thus e.g. in *šarirlig süŋükiŋä yalŋoklarïg täŋrilärig agïr ayag tapïg udug kïlgalï nägülük yarlïkadï* (Suv B17.1r8) 'Why did he order people and gods to honour and revere his relic bones?' Strangely enough, *-U ötün-* is used also when *ötün-* is used in its lexical meaning 'to beg' and not as pragmatic auxiliary in those cases in which the first verb and *ötün-* have the same subject; e.g. *yazokda bošunu ötünür biz* (Xw 101) is 'We beg to get free of sin': The vowel converb is here used as supine. This may be a Manichæan (or early) characteristic, however, as the use of *-gAlI ötün-* does not necessarily imply different subjects for the two verbs: We have *bargalï ötün-* 'to beg to go' in Ht VII 1883, a Buddhist text no doubt later than the X^{w}āstvānīft.

We now come to the supine constructions in the narrower sense. The *-gAlI* form is, in Uygur, often the complement of verbs of attitude, intention and expression, in which cases the two verbs always have the same subject: *kälgäli tapla-* (TT X 113) 'to be glad to come', *bargalï*

tapla- (TT X 275) 'to be glad to go', *-gAlI köŋül örit-* 'to set one's mind on doing' (very common), *tüŋlagalï unama-* (DKPAMPb 1177) 'not to agree to listen', *sančgalï kïlïn-* (TT X 359) 'to set about to stab', *körkitgäli kïlïn-* 'to set about to show', *vïrxar etgäli bašla-* 'to start to build a monastery', *yarmangalï sakïn-* 'to plan to climb'. *üzgäli katïglan-* is 'to exert oneself to break', *ukgalï kataglan-* (MaitrH XV 5r30) 'to strive to understand' while *tïdu katïglan-* with vowel converb signifies 'to work hard at hindering': In the first case the breaking or the understanding has not yet taken place; in the second, the hindering is going on. *tur-* 'to stand (up); to arise' denotes the expectation of an event when governing the supine (e.g. *ölgäli tur-* 'to be about to die'); with *-(X)p* or the vowel converb it expresses continuing or repeated action (section 3.251). We have *-gAlI küsä-* 'to wish to do' e.g. in Ht III 925, *-gAlI ugra-* 'to intend to do', e.g. in *birök ... nä nägü iš išlägäli ugrasar ol ugurda ... tep sözläyür ärdi* (U III 54,15) 'Whenever she intended to commit something, she used to say "..."'; *tïnlïglarïg ölürgäli ugradï* (TT X 35) 'he intended to kill living beings'. Further examples of this type of phrase are quoted or mentioned in EDPT 91b. There are no final clauses here (as is often the case with *-gAlI* forms discussed in section 4.636), because the two verbs cannot be said to constitute two separate clauses and because we saw that the meaning is by no means always final.

In *birök yargalï korksar* (Heilk II nr.3 l.4) 'If one is afraid to break it (a wound?) open, however, …' and *bušï bergäli kïzganïp* (Xw 168) 'to be (too) stingy to give alms' the meaning is most clearly not final, as the second verb of the phrase does *not* lead to the realization of the first (and is certainly not temporal); it can most clearly be characterised as supine. There is a similar instance in Ht X 499-504: *samtso ačarï pavandïn ünüp pavan kedinki suv ögän[tä] käčgäli adakï tayïp sürčüp yotasï ančakya kïršaldï* 'Master Xuanzang got out from the cell (but) was prevented from crossing the rivulet behind it when his foot slipped and the skin of his shin was scraped a bit'. In these three instances the main verb states what prevents or prevented the subject from carrying out the activity denoted by the supine; cf. English 'be afraid *to go*' and 'be prevented *from going*'.

In *kunčuylarka yarangalï sakïnčïn* 'with the intention of currying favour with women' (U III 75,10) the *-gAlI* form also has supine function: The expression comes from the phrase *-gAlI sakïn-* attested e.g. in MaitrH XI 14r28.

The Old Turkic supine can qualify adjectives, as can its Latin counterpart; e.g.: *tupulgalï učuz* 'easy to pierce' and *üzgäli učuz* 'easy to break' in Tuñ I S6 show that this function existed already in Orkhon

Turkic, while *bürtgäli yumšak* (TT X 445) 'soft to the touch' appears in a Buddhist text. Cf. *körgäli körklüg* 'beautiful to see' in Wettkampf 36-7; a similar expression appears in another Manichæan text, in TT IX 14.[603] Instances where a *-gAlI* form gets governed by *tägimlig* 'worthy of' (which otherwise governs the dative of what the head of the construction is worthy of) are of the same structure: e.g. *töz töpötä tutgalï tägimlig* 'worthy of being carried on the top of one's head' (TT IX 16); further examples appeared in TT IX 26 (damaged), DKPAMPb 1112, AbiIst 58 and MaitrH X 4v9.

In the sentence *yertinčüdäki kamag užïk bilir baxšïlarka baxšï bolgalï sini [bi]rlä täŋäši užak bilir kiši yok* (MaitrH XI 16r13) the supine is again not subordinated to a verb but to *täŋäši* 'equal'; it signifies 'There is no literate person able as well as you to become a teacher of all literate teachers on earth'.

4.3. *Sentence patterns*

The sections 4.31 and 4.32 deal with sentence patterns; another way to analyse sentences, namely looking at the way the speaker chose to arrange and organise what he packs into a sentence, is the topic of section 4.4.

The structure of interrogative sentences is identical to that of assertive ones. Yes / no questions are characterised by the particle *mU,* which is moved around in the sentence to follow the word whose applicability the speaker queries; the sentence structure thus remains unchanged by its presence. Its unmarked position is after the verb; when it appears elsewhere (e.g. *"Xagan mu kïsayïn" tedim* 'I said "Should I make him a kaghan?"' in Tuñ 5), however, the word it follows is focussed on. The Orkhon inscriptions have an element *gU* which shows that the speaker expects a negative answer; see part V for its use. *ärki* 'I wonder' can follow the particle *mU* in Uygur. Disjunctive yes/no questions are construed as in Azeri, with *yok* by itself for indicating the negative alternative: *burxan kutïn bulu yarlïkayok mu ol azu yok* (Ht V 3b4) 'Has he already graciously attained Buddhahood or hasn't he?'.

Here is a barely embedded indirect question: *anï bilmädi, öŋ[räki] ävirgüčilär užikïn yörügin tükäl kiltülar mu ärki tep* (Ht VII 870-2) 'He did not know whether previous translators had rendered text and

[603] This should be read as *körgäli tugïl[ïg* (or *togïlïg*), with a *+lXg* adjective attested also in Suv 619,22; TT IX 20 is similarly damaged, and the entry *'tuğıl'* in the EDPT is a ghost.

meaning in their completeness'. Other types of questions are asked by using interrogative(-indefinite) pronouns, discussed in section 3.134. Their presence does not change the basic sentence pattern either, although they are not always *in situ* and can also be attracted to the sentence onset. *mU* is generally not used in the same sentence as interrogative pronouns.[604] *nä* in *"... sädiräksiz yigi kïlïnč[l]arïg üklitip as[ïp] sarinü umadïn nä turgay mu siz" tep tedi* (Alex 22-23) '"Carrying out more and more deeds one after the other, will you be unable to be patient and stop at all?" he said'; is an indefinite pronoun here used adverbially and signifying 'at all'.

Classified by predicate there are two basic sentence patterns: The verbal sentence (in section 4.32) has a finite verb as its predicate (i.e. comment) or as part of its predicate. The non-verbal sentence (dealt with in section 4.31) has no such verb.

4.31. Nominal sentence patterns

The most common pattern of nominal sentences is bipartite, one part representing the topic, the other one the comment; e.g. *etigi [ärti]ŋü körklä* (Ht III 749) 'Its (i.e. a monastery's) ornamentation is very beautiful'. The copula, which is needed under certain circumstances described below, is not considered to be an essential part in any type of nominal sentence. Beside bipartite nominal sentence types, Old Turkic also has tripartite nominal sentences, which have elements such as *bar* 'there is', *yok* 'there isn't', *yeg* 'better' or *kärgäk* 'necessary' as (part of) their predicate (comment). Certain types of exclamatory sentences have no (explicit or implicit) topic – comment structure; theirs is a single-part pattern.

The copula is a normally and fully inflecting verb (see section 3.29). Copular sentences will nevertheless be discussed in this section, as the copula represents the link between topic and comment and is needed when the predicate (or comment) is a noun (phrase) and marked members of tense / aspect / mood categories are to be expressed. DLT fol. 198 states that the Oguz say *tägäl* (not '*tägül*', as 'emended' by the editors) instead of *ärmäz* for negating bipartite nominal sentences.[605] Cf. *tägil* 'nonexisting' in the Uygur document quoted on p.474 below.

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[604] The translation of *näčük ol birlä [to]o waŋ vudi atlïg xanlar? täŋäšgäy mü olar yeg alïg üzä?* (Ht VII 128-130) should, e.g., be 'How does he (compare) with the emperors Tang-wang and Wu-di? Will they equal in quality?' and not as translated by the editor.

[605] Both *tägül* and *tägäl* can come from **täg ol*, one through unrounding, the other through raising: Non-first-syllable /O/ was retained only when followed by /k/.

The following pasage in U I 8 (Magier) shows a few different types of what one would consider bipartite nominal sentences: *bo taš ärtiŋü agïr turur. bo bir yumgak taš, nägülük ol biziŋä?* 'This stone is exceedingly heavy. This (is) one lump of stone, what do we need it for (lit. what for [is] it to us)?' The first sentence could be defined as verbal although its 'comment' is a fully predicative adjective, or it could be defined as nominal considering the fact that *turur* has no lexical content but aspectual content at best; the other two sentences are nominal in every sense; they are tenseless (though especially the third one does refer to the time of speaking). In the first sentence there is a demonstrative as part of the topic. In the second one the topic *bo* 'this' points at the referent of *bo taš* 'this stone' of the previous sentence; in the third sentence the same topic is referred back to by *ol* 'that'; *bo* is demonstrative*, ol* anaphoric. Considering *biz* 'we' of this third sentence also to be part of what is 'given' for both the speaker and the addressee leaves *nägülük* 'serving as what' as predicate. This predicate (or rather what the addressee is asked to supply) is neither verbal nor nominal but adverbial; there is no copula in either of these sentences.

Another purely nominal bipartite sentence is *män kololadokum kamagdä ärklig yultuz ärmiš* (Dispute 1 r5-9) 'What I have discovered (is that the) stars turn out to be the mightiest'. *ärmiš* is merely the copula of the subordinated sentence, which is the predicate of the whole; there is nothing *explicitly* linking *män kololadokum* to *kamagdä ärklig yultuz ärmiš*.[606] This sentence is an instance of the most common type of nominal sentences, which has the structure 'A is B', whatever the nature of A and B and the content of 'is' in any particular case. The first two sentences in the passage quoted in the previous paragraph are of this type.

If the topic is in the 1st or 2nd person, the personal pronoun is made to follow the predicate, presumably becoming a clitic: Nothing else could explain this position, the natural place for the topic being initial position. E.g. *ol kïzlar "kapagčï biz" tep tedi ... "kapagčï kïrkïn biz" tedilär* (KP 41,5-42,6) 'Those maidens said "We are doorkeepers" ... "We are doorkeeper servants" they said'. Note that there is no number concord between subject and predicate; *kapagčï* and *kapagčï kïrkïn* are

[606] This fact made Peter Zieme, wo recently reedited the text, think that these were two sentences, the first of which he translates as "This is what I have found:". Since, however, there is no explicit "this is" to serve as predicate of the first sentence either, and since the second sentence is such a predicate, the two stretches have to be linked.

not in the plural. Sometimes pronominal subjects appear both in initial and in post-predicate position; e.g. *siz arok siz; aroklaŋ* (KP 55,4-5) 'You are tired; take a rest' or *"biz az biz" teyin* 'saying "we are few"' in the Tuñ inscription. These might, of course, also be cases of topicalization, which would make 'As for us, we are few' the better translation for the last-quoted example.

If the topic is unmarked for person, the sentences with both nominal and verbal predicates *may* end with the pronoun *ol* 'that'. One presumable source is a topicalising structure; a sentence like *bilgä Tuñokok añïg ol* should possibly be translated '(As for) the counsellor T., he is wicked'. In some cases, *ol* is neither topic nor comment but seems to function like a copula (as e.g. the 3rd person pronouns in Modern Hebrew); therefore, *ol* may also have been introduced at some early stage to complete the paradigm X *män* / X *sän* / X *ol*. Cases such as *kïlmïšlar ol* (Ht I 130) or *yaratmïšlar ol* (l.132, both 'they have made ...') show that copular *ol* is not inflected for number even when the predicate is in the plural. In *ayalarïn kavšurup katïglamaklïglar, üč ät'özkä tägmäkig üzlünčü tüp kïlmaklïglar ol* (l.154), this *ol* is shared by two nominalized verbal predicates: The sentence signifies 'They fold their hands and exert themselves and make the attainment of *trikāya* their ultimate base'.[607] *täŋri baxšï ärklig ol* (U III 46,1) signifies 'The divine teacher is mighty', *bo nišan män Mïŋ Tamürniŋ ol* (USp 1,10) 'This mark is mine – Miŋ Tämür's'. If, however, the overall meaning was 'As for X, it is Y', these translations should be 'As for the divine teacher, he is mighty' and 'As for this mark, it is mine, M.T.'s' respectively.

In *küsüšüm ol ötüngülük tolp yertinčüg yarotdačïka* (Suv 372,12) 'It is my wish to pray to him who enlightens the whole world' the phrase *küsüšüm ol* could be paraphrased with *küsäyür män* since it governs the small clause around the *-gUlXk* form; *ol* is clearly needed for linking the topic *küsüšüm* to its predicate. In *Kulsabadi xatunlï Vipulačandrï teginli bolar ikigü mäniŋlär ol* '(The god Indra said:) "Princess Kuliśavatī and prince Vipulacandra, these two, they are both mine"' (U III 27,16) *ol* serves as copula. Reference to the princess and the prince is left-dislocated (see section 4.4); *bolar ikigü* then takes up this reference and 'mine' is predicated on that. The second suffix in *mäniŋlär* is the mark of number agreement between topic and

[607] The composite suffix *-mAk+lXg* is dealt with in OTWF pp. 153-155 but not its predicative use which we find in this sentence: Here the meaning appears to be a simple present.

comment, in this case added to a noun phrase consisting of a headless genitive.

Above we quoted the sentence *nägülük ol biziŋä?* (U I 8) 'What do we need it for?', literally 'For what (is) it to us?'. This sentence is not an instance of the equational pattern we have dealt with hitherto in this section. Another common way to express 'need' is with the modal nominal predicate *kärgäk* '(it is) necessary'; the 'needer' again appears in the dative case, which is an integral part of the sentence pattern: E.g. *el tutdačï bäg ärkä süli ašlï kertgünčli üčägü täŋ kärgäk* (TT VB 106) 'A ruling nobleman is equally in need of three things: an army, provisions and faith'. A copular verb (see section 3.29) is added if verbal categories demand it or if the sentence is to be subordinated: *aŋar sizlär kärgäk boltuŋuzlar ärsär sizlärni eltgäy ärdi; män kärgäk ärdim ärki.* (U III 69,25) 'If it had turned out that he needed you (pl.), he would have fetched you; apparently it was me whom he needed'; *maŋa ... bor kärgäk bolup* (USp 1,2 and similarly often in other economical documents) 'I needed wine and ...'. In TT VB 52 the needer appears in the nominative: *nom bošgut bošgundačï tüzünlär ymä nomlug tayakïg ašaguda yegüdä kertgünčlüg elig kärgäk* 'When *śaikṣas* are to enjoy the support of religion, they need (to have) the hand of faith' (an extended metaphor, 'support' for 'doctrine', 'eat' for 'enjoy', 'hand' for 'faith'). To sum up, the pattern consisting of a nominative and (normally) a dative plus, usually, the predicate *kärgäk* generally corresponds to an (indicative) proposition stating that the entity referred to by the dative *needs* the entity referred to by the nominative.

The DLT proverb *sögüt söliŋä, kadïŋ kasïŋa* 'The willow for its sap, the birch for its bark' consists of two nominal sentences whose predicative dative has a different sort of content, viz. that of purpose.

The ablative can also be predicative, e.g. in *nom keŋrülmäki yänä kiš[i] yalŋukdïn tetir* (Ht VII 807) 'The spreading of the doctrine, in turn, comes from persons'.

The predicate *yeg* 'better' is bivalent, as in the proverbs *altun sarïgïta körö ešič karasï yeg; yürüŋ kümüšdä körö ayak tolosï yeg* (HamTouHou 16,13-14) 'Better than yellow gold is that the pot should be black; better than white silver is that the bowl should be full': It therefore forms tripartite nominal sentences.

We have already twice met the sentence *nägülük ol biziŋä?* (U I 8) 'What do we need it for?', which shows that sentences with interrogative pronoun do not need a copula. This is so already in Orkhon Turkic *elim amtï kanï* (KT E9) 'Where is my realm now?'

Then consider the sentence *kayu ärki beš?* (MaitrH Y 143) in the following context: *asag tusu kïlmakï ymä beš türlüg ogrïn bolur. kayu ärki beš tep tesär, äŋ ilki ...* 'His bringing benefit (to living beings) takes place in five ways. Which five these are?[608] Firstly, ...'. *beš* 'five', which takes up the reference of *beš türlüg ogur*, must be the topic while *kayu* 'which', left-dislocated as so often with interrogative pronouns, is comment.

Exclamatory expressions such as *nä ymä taŋ, nä ymä tavrak* 'Oh how surprising, how fast (it is)!' or *ančama mäŋi! ančama ädgü asïg tusu! ančama ädgü kut kïv!* (MaitrH XI 3v7) 'Such bliss! Such good favour! Such good luck and blessing!' are bipartite only in the sense that their implicit topic wholly follows from the situation in which the conversation is couched. The sentence *nä sav ärki t(ä)ŋrim* (MaitrH XX 1r17), which is used with the meaning 'What matter might (this) be, my lord?' differs from nominal interrogative sentences presented in the previous paragraph by also lacking all reference to the topic; its exclamatory nature may explain this ellipsis. Even an address like *eliglär eligi-a* ‚O king of kings!' (U IV A 103) could be considered to be implicitly bipartite in the sense that it informs the addressee of the speaker's view of him as 'king of kings'.

Only a proper name used as vocative, e.g. *a m(a)xas(a)tvï-ya* 'Oh Mahāsattva!' (Ht III 779), can be said to be a sentence consisting of a single member, beside of course all types of expressive exclamations: These utterances show no topic – comment structure. Vocative elements are often also interpolated into utterances, e.g. already *türk bodun* 'the Turk (or 'united') nation' in Orkhon Turkic (KT IE22). Vocative NPs are often linked to imperatives, as in *körüŋlär ädgü tïnlaglar* 'See, good creatures!' in MaitrH XX 13v3.

Another type of non-verbal sentence is that construed with *bar* 'there is' or *yok* 'there isn't' as predicates. With *bar* we find e.g. *bay ymä bar, yok čïgay ymä bar* (KP 6,1) 'There are both rich and poor people'; with *yok* e.g. *mini üčün ämgäntäči kim ärsär yok* (U IV C 152) 'There is nobody whatsoever who could suffer for me'. The domain of existence can be supplied in the locative case: *azu bo savïmda igid bar gu?* (KT S 10) 'Or is there anything false in these my words?' In Uygur the aorist of *bul-tuk-* 'to be found' serves as verbal alternative to *bar* and *yok* as in the following passage: *bar mu munuŋ köküzintä*

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[608] *tep tesär* 'if one says' has not been translated here: This is a very common strategy for asking rhetorical questions then answered by the author. See section 3.343 for *ärki*.

kutrulmaklag urug tarïg azu yok mu? bultukar mu munuŋ köŋlintä köküzintä korkïnč ayïnčlïg ädgü töz yültïz azu bultukmaz mu? (MaitrH Y 104-108) 'Is there in his breast the seed of liberation or isn't there? Is there to be found in his heart and in his breast the good root of fear (of god) or isn't there?'[609]

Possessive constructions have a tripartite structure: They comprise the possessor, the possessed and *bar* or *yok*. Possession is predicated by having *bar* (its absence by *yok*) follow the possessed entity with the possessive suffix referring to the possessor: *özüm kutum bar* 'I myself enjoy divine favour'; *ögrünčüŋ yok* (IrqB) 'You have no joy'. *muŋar nä ärsär yazok yok* (PañcFrag II 23) 'He does not have any sins whatsoever'[610] shows that the construction is different when reference to the possessor is not limited to the possessive suffix: The nominal referring to the possessor is in the dative case and the possessed has no possessive suffix. The same possessive dative appears already (as *bodunka*) in the following Orkhon Turkic instance, showing that the construction was not copied from some foreign language: *näŋ yerdäki xaganlïg bodunka bintägi bar ärsär nä buŋï bar ärtäči ärmiš* (Tuñ 56) 'If any independent nation were to have one like me, what trouble could it ever have?' The first instance of *bar* expresses possession in a rather concrete (though not economical), the second in an abstract sense.

The well-attested expression *yïdï yokïŋa tägi* (e.g. TT IV B56) 'till the disappearance (even) of its smell' clearly comes from a nominalisation of the sentence **yïd+ï yok* 'It's smell is absent', the second possessive suffix referring back to the entity whose complete disappearance is envisaged. Although they are grammatical predicates in that they alternate (as shown below) with forms of the copula, show possession and for other reasons, *bar* and *yok* are in fact nominals signifying 'existing' and 'non-existing' on the one hand, 'existence' and 'non-existence' on the other. The attributive and referential uses can be found in the passage *yok ärmäz äzük sav sözlädimi[z], yokug bar, barag yok tep tedimiz* (MaitrH XX 14r3-4) 'We have said non-existing (*yok ärmäz*) and mendacious (*äzük*) things, have presented the non-existing as existing and the existing as non-existing;' *yok* is here first used adnominally, then nominally. The binomes *bay bar* and *yok čïgay* (e.g. KP 6,1) respectively signify 'rich' and 'poor'. *bar* and *yok*

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[609] Note the ellipsis of the nominative in the second part of the disjunctive construction.

[610] 'whatsoever' translates *nä ärsär*; see section 3.134 for this expression of generality. Cf. *kim ärsär* in the U IV C152 sentence in the previous paragraph.

can even be topics, as in the proverb *bar bakïr, yok altun* (DLT fol. 181) "What is present is (like) copper (one cares nought about it), what is absent is (precious like) gold".

Sentences of existence are transferred away from the present by verbal means; e.g. *yana ymä bar ärdi sikwen atlïg nomčï ačarï* (Ht VIII 76) 'Moreover, there was the preacher and teacher named Qi Xuan'. Both *amtïka tägi takï bar ärür* (BT I A_2 4) 'It (i.e. a *sūtra*) still exists even till now' and *ïnčïp amtï yertinčüdä bo užak yok ärür* (MaitrH XI 15r20) 'However, this character does not exist on earth at present' show the adverb *amtï*; *är-ür* was apparently joined to *bar* and to *yok* to show that the present in the narrow sense is meant.

In *ädgü külïnčï bar ärip ...* (BT II 1201) '(if) he has good deeds (to his favour) and ...' and *ol äki kiši bar ärsär* 'since there are those two persons' we see that *bar* needs the copula to get subordinated. Unlike in Turkish, *bar* and *yok* are not replaced by the converb of the copula in case of subordination; the copula is added to the construction as it is: *kimniŋ birök küči küsüni bar ärip täv kür alï altagï yok ärsär ...* (PañcFrag II 263) 'Whoever, however, has power (*bar ärip*; but) has no tricks and guiles, ...'.

Expressions like *tolp sansar i[či]ntäki tïnl(ï)glarïg näčä ämgätgülük tolgakguluk erintürgülük busanturguluk išlär küdüglär ärsär,...* (TT II,2 41-46) 'However many matters there may be for which to cause pain and affliction to all the creatures in *saṃsāra*' or *üküš ažunta ašnu ärinätüv atlïg balïkta ärnem atlïg elig xan ärti* (HamTouHou 1,13) 'Many generations ago there was a king named Araṇemi in the city named Aruṇāvati' show that *är-* by itself was also used for expressing existence.

In the following sentences *är-* expresses possession: *bögü biliglig burxanlarnïŋ iki törlüg ät'özläri ärür* (Maitr 26A r11) 'the wise minded Buddhas have two types of bodies'; *sözläšgüŋ ärsär* (UigBrief D) 'if you have anything to discuss'. In *käk birlä katïglïg savlar köŋülintä ärmiškä* (BT II 991) the translation can be existential ('because there are things mixed with hate in one's heart') or possessive ('because one has ... in one's heart').

ol, primarily 'that' but also widely used as copula, is also found in sentences indicating existence: *ordo balïk ked[in tagďïn] buluŋïnta altï bär[ä ...] bir säŋräm ol* (Ht III 273) '6 miles to the north-west from the capital there is a monastery'; [611] *ol tamuta ymä ülgüsüz üküš čadïrlïg suvïn tolu ulug ešičlär ol* (DKPAMPb 63) 'Now in that hell there are countlessly numerous large pots full of potash water'.

[611] Assuming that the lacuna did not contain anything relevant to this matter.

4.32. Verbal sentence patterns

Verbal sentences, especially sentences with fully or partly lexical verbs, can be analysed as hierarchical structures, in that they consist of noun phrases serving as arguments, of a central verb phrase assigning participant tasks to these arguments and sometimes of adjuncts. The sentence need not include reference to all of its arguments; this reference can very well be supplied by the context without any explicit trace of it appearing in the sentence itself. The lack of such trace is the rule when the reference-supplying context consists of language material; less so when the reference comes from the situation. The tasks carried out by noun phrases within sentences have already been accounted for in section 4.11, where we dealt with the various case functions.

One of the arguments in the verbal sentence will be the subject of the verb. The addressee can be expected to extract reference to the subject, as to any other participant, from the context. All entities retrievable by zero reference are part of (or constitute) the sentence's topic. The subject of the second sentence in *biziŋ beš yüz ärän kanča bardï? äsän tägdi mü?* 'Where have our 500 men gone? Have (they) arrived safely?' (KP 53,4-6) is, of course, meant to be supplied from out of the first, without need to even put *tägdi* into the plural.

When there is no explicit reference to the subject and its identity is not made clear from the context either, we speak of a varaiable. *öŋtün kedin satïgka yulugka barsar bay bolur* (KP 13-14) signifies 'One becomes rich if one goes to the east or to the west to trade'. The question to which this statement is an answer is also couched in terms involving a variable, and so are the other answers to the same question when presented to other addressees; the sentence itself would have been identical if there had been zero reference to some subject from the context. Another example: *ol tašïg özi üzä tutsar kopga utgay ... ol tašïg özintä tutsar yat kiši adartu umaz* (BlattRun 17-18, 23-24) 'If one keeps that stone on oneself, one will prevail in everything ... If one keeps that stone on oneself, strangers will not be able to harm one'. This is not basically different (though perhaps less widespread among European languages) than when an oblique argument is neither explicit nor implicit, as the object in the sentence *nägülük ölürür sizlär* 'Why do you kill?'; just as the speaker has no specific object in mind in this sentence, he has no specific subject in mind in the previous ones.

In other cases, deverbal noun dummies are used for filling object slots: This, I suspect, is the main reason for the appearance of *ölüt* in *ölüt ölür-* 'to carry out a massacre' with the verb just mentioned, and

of *čašut* in *čašut čašur-* 'to slander' (both documented in OTWF 310-11). *yol* in *yol yorï-* 'to travel' and *nom* in *nom nomla-* 'to preach' could have been replaced by more specific terms if the speaker / writer had deemed them necessary or had been able to supply them. The appearance of verbal abstract objects is obligatory when these are to be accompanied by their subjects; the phrases *arslan silkinigin* (or *silkinmäkin*) *silkin-, arslan yatgïšïn yat-* and *arslan ilinčüsin ilinčülä-* are quoted in OTWF 204. *yol yorï-* shows that a real etymological connection is not necessary between the two elements, although alliteration does appear to be the general rule.

Adjuncts, which express, among other matters, when, where, how or why the event referred to by the sentence takes place, are generally not made obligatory by the grammar. They can consist of phrases or clauses. See section 3.3 for adjuncts, section 4.2 for adjunct phrases and section 4.63 for adjunct clauses.

Predication is sometimes shared between a verb and a nominal, which is unmarked for case. There are three types of this:

Firstly, some intransitive verbs are able to govern descriptive predicative adjectives, e.g. *busušlug* in *nä üčün busušlug kältiŋiz?* 'Why did you come in sorrow?' (KP 4,5). Thus also the quantity adjective *alku* in *ädgü törö ädgü kälïnč alku kalgay* (TT II,1 21) 'Good habits and good deeds will all stay'. Similarly, certain transitive verbs also govern adjectives which they predicatively apply to their direct objects, as in *sakïnč arïg tut* (ChristManManus, Christian ms. v 12) 'Keep (your) thoughts pure!'.

Thirdly, a transitive verb can govern two nouns or pronouns as objects; the second noun (in the nominative) here tells us what the first (in the accusative case) is made to turn into: inscriptional *özümün öŋrä bïŋa bašï ïttï* 'Myself he sent (*ïd-*) forward (as) captain'; Uygur *äki kïzïn tapïg berti* 'He gave his two daughters (as) tribute' or *altï azïgïn ... käyikčikä bušï berü* (Ht III 259-60) '(the white elephant) gave his six molars to the hunter (as) alms'. A reversal in the order of topic and comment is not excluded; the topic remains evident by being marked with the accusative suffix: *enč äsän kälzun mini* (U II 64,9) 'May he make me be well and in peace'. We quoted instances with the verbs *ïd-*, *ber-* and *kïl-*; *yarat-* 'to create' and *ata-* 'to nominate' are also used with two objects.

Participles are adjectives and could therefore, in principle, also be used predicatively. Some of them, the *-dAčI*[612] form in inscriptional Turkic, the aorist, *-yOk* and *-mAyOk, -mIš* and *-mAdOk*, *-(mA-)gU* and *-(mA-)gUlXk* forms in the whole of Old Turkic, could serve both as participles and as finite verb forms. The meanings of *-yOk*, *-mAyOk, -mIš* and *-mAdOk* are different when they are participles and when they are not, which means that – given the context – confusion between participle and finite form was unlikely. When, however, we e.g. find an aorist form in predicative position, the predicate can *in principle* be understood either as a verbal or as a nominal one: *mäniŋ köŋülüm näŋ ornanmaz* (TT II,1 40) could signify either 'my heart hasn't been calming down' or 'my heart is a quite unstable one'.[613] In some such instances the distinction between 'finite' and 'non-finite' may possibly disappear in main or in subordinate clauses. In the case of the aorist, finite use, which is statistically more common than participial use, will be the hearer / reader's first (and hence only) choice.

The distinction between verbal and nominal predicates is blurred also through the existence of a well documented hybrid class: There are subordinating pronouns and conjunctions governing infinite subordinate clauses, both with participles and converbs, e.g. *muntada adïn takï öŋi aš ičgü yok kim bo ... ač barsïg tirgürgülük* 'There is here no other different food or drink with which to revive this ... hungry tigress'; *tïnlïg oglanï yok kim mäniŋ ... kam kadašïm bolmadï ärsär* 'there are no living creatures who did not become my relatives (in previous lives)'. For Old Turkic, where verb forms capable of nominal behaviour possess all verbal categories, one might want to do away with the notion of finiteness and deal only with categorial bundles in word classes.

Unlike many (but not all) languages, 1st and 2nd person verb forms can also be accompanied by *nominal* subjects, not only pronominal ones. Three Orkhon Turkic examples among many, with the 1st and 2nd persons singular and the 2nd person plural: *ilgärü barïgma bardïg, kurïgaru barïgma bardïg* (KT E23-24, BQ E20) 'Those of you who went east departed and those of you who went west departed (as well)'; *yigirmi kün olorup bo taška bo tamka kop Yollug Tegin bitidim* (KT SE) 'I (but the text contains no apposition), Y. T., wrote all of it on this

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[612] There is no evidence that *-mAčI*, which serves as negative counterpart of *-dAčI* in the inscriptions, was used as a participle; in Uygur we find *-mAdAčI* in participial use. *-dOk* forms, on the other hand, are never found in finite use, though *-mAdOk* is.

[613] In the second case it might be necessary to end the sentence with *ol* (see section 4.31), as e.g. in *kök täŋri yaŋïn kïlmïšlar ol* (HtsBiogr 130) 'They have done it in the manner of heavens'.

stone, on this wall, sitting (at it) for 20 days'. *ölügi yurtda yolta yatu kaltačï ärtigiz* (KT N9) '(All these, my mother the queen, my mothers, elder sisters, daughters in law and princesses, who would survive would become female slaves); the dead among you would be left lying in deserted camps and on the road': The adjective *ölüg* 'dead' is the subject of the 2nd person plural verb phrase *kaltačï ärtigiz*. Here an example from the 4th (runiform) Stein ms. (l.6): *atï öz apa totok ulatï kamïg atlïg yüzlüg otuz är kältimiz* 'Thirty of us came, all men of renown, the (ruler's) nephew Ö. A. *totok* and the others'. The best rendering of the content of this Old Turkic sentence into English included a series of appositions, but this does not correspond to its actual structure: That presents 30 men with certain attributes and mentioning one of them, as formal subject of a 1st person plural finite verb.

-mA- negates verb forms. Double negation gives positive meaning, as *-mAdOkXm yok*, or in *tïnlïg oglanï yok kim mäniŋ ögüm kaŋïm ... bolmadï ärsär* 'there are no living beings who did not become my parents'. The following negates the copula where English would negate the topic or the predicate: *alko tïnlïglar mäniŋ yatïm ärmäzlär* 'All beings are not foreign to me (= none are my strangers)'. The negativity of a superordinated verb does not extend to a subordinated one; one example among many is *takï kamag kamlar ter(i)läp näŋ tirgürmägäy* 'Even all the magicians will, assembling, definitely not bring him back to life'. Therefore, converbs have to be additionally negated: *burxan kutïlïg küsüšintä ančakï(y)a ymä tïnmatïn kïlguluk išiŋä ... arïtï armadï* (U IVA 272) 'Not leaving off a bit in his wish for Buddhadom he did not at all get tired of the task he was to carry out'.

4.4. *The organization of information in the sentence*

The second way to analyse a sentence (the first way being what we looked at in sections 4.31 and 4.32) is to deal with the flow and organization of information taking place in it. In Old Turkic the most salient means for this purpose is constituent order. The content of sentences in which the same information is organized differently will generally be understood in the same way as far as truth values are concerned.

The order of sentence constituents is in Old Turkic strongly topic – comment oriented in all stages of the language, all styles and text sorts and all putative dialects; other purposes served by constituent order can be iconicity ('first noted first mentioned'), the linking of elements to previous sentences and the forward motion of the plot. When the

topic is purely deictic, the relevant pronoun is added *after* the predicate. Otherwise, the last constituents in a sentence normally belong to the predicate. Moving constituents around so as to arrange them in the topic – comment order is simpler with the nominal sentence than with sentences having a finite verb, which is why we will start with that. An example for a nominal sentence is *ädgü+g ol ärinč* (KT) which, considering the context, can have a translation like 'That is probably the good you got from it'.[614] Again translated freely, *mäniŋ sakïnčïm ymä antag ok* (Ht I 229) is 'Now that is what I think': In both of these cases, the demonstrative is predicate. In exclamative nominal sentences the topic – comment order can be reversed: *ančama ädgü mäŋi ärür küsämiš küsüšlar kanmakï* (MaitrH XV 13r6) 'What great joy it is when what one had hoped for is fulfilled!' Non-finite verb forms can also be either topics or comments in nominal sentences, but that will be dealt with further on, as the construction is used for making the verb of a verbal sentence unpredicative.

In the following sentence a nominal clause is made the object of a verb of thinking; stating the clause which is the object of *bil-* is more important to the writer than giving first position to the rather general subject of the whole sentence: *tükäl bilgä täŋri burxan yarlïkamïš köni kertü nomnuŋ tïnlïglar bo montag yegin adrokïn bilzünlär* (TT X 557-559) 'May living beings know that the rightful and true doctrine preached by the perfectly wise divine Buddha is so superior and excellent' or 'May the living beings know this superiority and excellence of the ...'. This object clause could by itself have been *tükäl bilgä täŋri burxan yarlïkamïš köni kertü nom ärtiŋü yeg adrok ol* (or *ärür*).

Left dislocation topicalises both in nominal and in verbal sentences. In the following nominal sentence the interrogative phrase *nä törlüg kiši* 'what sort of a person' is in its normal initial position; however, the topic pushes itself before it for prominence, not without leaving demonstrative *bo* as trace:[615] *bo montag körksüz ... yatagma nä törlüg kiši bo* (ChristManManus, Manichæan ms. r 5) 'This (person) lying there in such an ugly way, what sort of a person is he?'. Another nominal sentence showing left-dislocation is *kazganč näŋ tarïg tarïmakda ädgü yok* (KP 13,2) 'As for profit, there is absolutely none

[614] The *+g* is a variant of the 2nd person possessive suffix, here referring to the beneficient of 'the good', i.e. the advantage.

[615] In Turkish such trace demonstratives are unstressed. This must have been the case also in Old Turkic, where they are placed after the predicate instead of being in the normal topic position *yat-agma* is a participle representing the subject of the action of 'lying down'.

better than in agriculture', the undislocated place of *kazgančʼ* would have been after *ädgü*, its attribute. What is important to note is that under such movement no government relationships are changed.

Left dislocation of the topic is rather common also in verbal sentences, where we find two types: Either topic and subject are referentially identical, or the latter is different but in some way related to the former (e.g. by being part of it); the matter has been discussed in Erdal 1998b. Here is an example for topic / subject identity under left dislocation; reference to the topic is effected by the possessive suffix on *är-mäk+i*: *täŋrikänimiz uzun özin kalïn kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) 'Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble'.[616] The type with distinct topic and subject is sometimes called 'double subject construction'. It is found e.g. in inscriptional *karlok tirigi barï türgäška kirti* 'As for the K., all among them who saved their lives joined the T.'. The sentence *"kögmän yolï bir ärmiš, tumïš" teyin äšidip "..." tedim, yerči tilädim.* (Tuñ 23) 'As for the Sayan (range), I heard that there was only one way across it and that it was blocked, and said ...', finally, is another example for the phenomenon. In both examples the topic, *Karlok* or *Kögmän,* is in the basic case form, and reference to it is taken up by the possessive suffixes of *tirig+i bar+ï* and *yol+ï*. *yolï bir* is a nominal clause with copula, serving as a complex predicate (or 'comment'), as the sentence *tirigi barï türgäška kirti* serves as complex predicate. The sentence with *barï* reminds us of *tetselar üküši körmädin äšidmätin kaltïlar* (Ht VIII 74) 'The students mostly went on not to see and not to hear', or 'As for the students, most of them (*üküš+i*) remained ...'. The most salient 'relationship' is the inalienability of body parts, as between the subject and his mouth in the following: *kayu kiši agïzïntïn äyrig sarsïg sav ünsär ... anta ok täŋri burxanïg öp sakïnïp ïnča tezün* (DKPAMPb 539) 'If a person has used harsh and abusive language, let him think of divine Buddha and utter this'. *kayu kiši* is the subject of the main verb, for which the nominative is normal; by making it precede the conditional clause with *sav* as its subject, the possessive suffix of *agïz+ïn+tïn* serving as only link between the two clauses, we effectively get the situation where the person is not directly to blame for the harsh and abusive language while remaining the topic. In the following Manichæan example (M I nr. 8 VII r2-4) resumptive *ol kiši*

[616] We know that *täŋrikänimiz* is not a vocative standing outside the sentence, as it is preceded by the vocative *täŋrikänim*. The sentence is followed by another two, which show a similar structure.

is topicalised because it takes up the generalising *kanyu kiši*: *kanyu kiši kim bo yarokun ärmäk[ig] käntü köŋülin ičrä tarïmïš ärsär, ol kiši bälgüsi antag ärür* 'Whatever person has planted this enlightened existence into his own heart, that person – his characterisation (*bälgü+si*) is as follows:'. In a sentence in Maitr XV 10v13 *kamag tïnlaglar* (thus) 'all creatures' is the topic while *az övkä biligsiz biligläri* 'their ignorance of lust and anger' is the subject.

Grammatically redundant pronouns are made to start sentences for contrast against other participants, e.g. Orkhon Turkic *biz az ärtimiz yavïz ärtimiz* 'As for us, we were few and in a bad state'.

In *ol kim burxan tetir, nom ol ok ärür* (TT VI 418), Buddha manages to become both topic and comment. The sentence says 'That which (or 'He who …') is called Buddha, the teaching is nothing else but him' (or 'that'). I have chosen the 'nothing else but' construction to render focussing through the particle *ok*. What we have is the nominal sentence *nom ol ärür*, with both topic and predicate, the nexus getting predicated upon the noun phrase *ol kim burxan tetir*, which consists of a demonstrative qualified by a relative clause. The meaning basically to be conveyed is that Buddha and the teaching are one and the same. The author could therefore have written *burxan nom ärür* or *nom burxan ärür* if he had not intended to stress the import of this identity. However, beside *ok* to underline the status of Buddha as predicate he chose to apply to Buddha left dislocation as well, leaving *ol* as trace in the kernel sentence.

The element *ärsär* is exceedingly common as topicaliser, e.g. *tavgač eli ärsär, märeče atlïg uč kïdïg türk türgeš yer ol* 'As for China, that is a Turkish, Turgeshian, distant land of the *mleccha* category'; *siz tïdïmlïg xanlarnïŋ töz yïltïzda siz ... män ärsär täŋri yalavačï män* (Wettkampf 53) 'You are from the root of crowned kings ... As for me, I am a messenger of God'. There is very extensive listing of such instances in §§ 29-33 of the entry *är-* in the UW, pp. 406-407. An example where *tesär* is used for the same purpose is quoted in chapter VI. Both words have survived in Turkic languages as topicalisers to this day.

We stated above that it is not simple to move the finite verb around in the Old Turkic sentence; the reason for this is that finite verb forms have a strong affinity with the position at the end of a sentence. Finite verb forms are, however, moved away from the end for purposes other than topic / comment structure, in the following types:

Imperatives and other verb forms signaling an unusual energy on the mind of the speaker are sometimes left-dislocated: *ögsüz kalmïš bo irinč tïnlïg ämigimin ämip bolzun mänïŋ oglum* (PañcFrag II 29) '(I'll)

let this poor creature suck my teats and – well then – let it become my child!'; *"tal atïn" tedim* (Tuñ I N1) '"Dive (into it) with (your) horses" I said'. *otg[urak] kertgünzün bo savag* (TT X 467) 'Let her put all her trust in these words!' In Suv 609,11 the prince who is ready to sacrifice his body for the hungry tigress says: *bulgay ärki biz yeg adrok buyanïg* 'We will hopefully attain excellent *puṇya*'. Great emotion brings the verb to initial position: *muŋ ay muŋ ay, yitirmiš män isig sävär amrak atayïmïn* 'Oh sorrow, oh sorrow, I have lost my dear baby, whom I love warmly' (Suv 623,10); *kalmïš süŋük yer sayu, ïčgïnmïš män känčimin, sävär amrak atayïmïn* (Suv 626,16-17) 'The bones lie around everywhere, I have lost my baby, my dear chick whom (I) love'. The sentence *ašukmaz mu köŋülüŋ*, finally, was written by an old father in a letter he sent to his son in an emotional plea to come for a visit (UigBrief C12); it signifies 'Doesn't your heart yearn (for us)?' but a freer translation in the context could be 'Aren't you homesick?'

A causal relationship between events can bring the verbs to the fore and make them precede subjects: *ymä yegädti y(a)rok kün k(a)rarïg tünüg alŋadturdï ... ymä anta ken [är]ksinür elänür eliglär xanlar k(ä)ntü öz elin ičrä* (M III nr.8 III v10-15) 'And the bright day vanquished the dark night and weakened it; … and thereupon they rule and govern, the kings and rulers, within their own realms'.

Converb phrases connecting with the pre-text can precede the subject when the action is a direct reaction: *munï körüp bodisatv ... ärtiŋü korkdï sezinti* (Suv 630,10) 'When he saw this, the *bodhisattva*, ... he became exceedingly frightened ... and worried'; *anï körüp yäklär bägi vayširvanï täŋri, yašlïg közin yïglayu ...* (TT X 296) 'When he saw that, the lord of the demons the god Vaiśrāvana, ... he wept with wet eyes and ...'.

S – O – V is the unmarked order, S being preceded by connectives (such as *anta ötrö* 'thereupon'). Other object positions demand explanations. In the following example, e.g., the locative precedes the subject in order to stress the distance of the two goals: *üstün akaništabavan altïn aviš tamu ... yer suvlarda ol yarok yaltrïk tägir* 'That bright gleam reaches all the way to the A. above and the Avīci-hell ... worlds below'. Objects can also precede the subject when they are topics carried over from the preceding co-text; e.g. *čik bodunug bïŋam sürä kälti* 'The Č. tribe was driven hither by my military unit'. The accusative is pushed to the first part of the sentence also when something else occupies focus position, e.g. *elig törög agï barïm tutar* (KP 9,1) 'Money (*agï barïm*) is what keeps the state (*el törö*) going'. In the following Orkhon Turkic example, *üd*, the direct object, is topic; it precedes *täŋri*, the subject, which is focus of the utterance: *üd täŋri*

aysar kiši oglï kop ölgäli törömiš 'Since it is god who determines timing (*üd*), the sons of men are all born to die.' The reason for *üd* 'time' lacking the accusative suffix might be its genericity; the sentence is uttered in consolation for death. In *örgün anta yaratïtdïm, čït anta tokïtdïm* (ŠU) the unmarked direct objects precede the locatives, which are in focus: 'It was there that I had my throne (*örgün*) erected and a (border) fence (*čït*) set up'. In *bo buyanag äŋ öŋrä ävirär biz täŋri bögö el bilgä arslan täŋri uygur tärkänimiz kutïŋa* and similar sentences in the colophon of MaitrH Y, the deflexion of *puṇya* (*buyan ävir-*) is topic, the person to whom it is deflected (in dative case) the relevant new information.

Personal pronouns follow nominal predicates as they follow the verb, presumably lacking stress (as in modern Turkic). This means that the topic follows the comment when this topic is a personal pronoun, instead of preceding it. Hence the placing of a personal pronoun at the end cannot be used as an indication for its being predicative. It is an indication that it is getting cliticised and turning into a grammatical personal marker without any role in the topic-comment structure. The sentence *täŋrim, bizni yarlïkaglï buyančï kertü täŋri siz siz* (BT V 400-402) is to be translated as 'My lord, it is you (*siz*) who are the true god of good practices, who commiserate with us' with 'you' as comment. This corresponds to Turkish *sizsiniz*: The first *siz* is comment, the second the trace of the copula. If 'you' were a neutral topic we would have **täŋrim bizni yarlïkaglï buyančï kertü täŋri siz*, while **täŋrim siz bizni yarlïkaglï buyančï kertü täŋri siz*, with *siz* added in the first position, would mean that the 2nd person is being contrasted with other possible topics.

The position just before the verb serves focussing: In *täŋrili yäkli yaroklï karalï ol üdün katïltï* (Xw 7), e.g., *ol üdün* 'at that time' is in focus: 'It was then that gods and demons, light and darkness were mingled'. When the focus position just before the verb is occupied, non-finite elements can be pushed after the verb; this may be the reason for the place of the converb in the following sentence: *tegin kaŋï xanka ïnča tep ötündi ïglayu: "..."* 'Crying, the prince spoke the following words to his father the king: "..."' (KP 4,7). For the purpose of focussing, predicative direct objects can be moved *away* from preverbal position also when they have no accusative marking: *učugma k[ušlar] kälip tämirlig yiti tarmaklar[ïn] üzä tanču tanču ätimizni üz[üp] eltirlär* (MaitrH XX 14r14) 'Flying birds come and with their iron claws tear away our flesh piece by piece'. The unmarked place of *tanču tanču* would have been adjacent to the verb; the correct

formulation of the process may just be that elements get highlighted by being moved from their normal position, whatever it is.

Here are Christian examples for the postponement of the indirect object: *ol üdün Xerodes xan ïnča tep yarlïkadï olarka* (U I Magier 3) 'Then king Herod decreed the following to them'; *barïp yükünäyin aŋar* (U I Magier 8) 'let me go and worship him'; *yükünč yükündilär ögmäk alkïš ötündilär elig xan m(ä)šixa täŋrikä* (U I Magier 20) 'they worshipped and expressed praises and blessings towards the divine king Messias'. *pašik sözlägüg ayu yarlïkadïŋïz olarka* 'you graciously admonished them to sing hymns' (from a Manichæan text) also places the backgrounded indirect object after the verb. In Buddhist *bo ... buyan ädgü kïlïnčïg äŋ öŋrä ävirär biz ... tört ... täŋrilärkä* 'We transfer the credit for this meritorious deed first of all to the four ... gods', on the other hand, the postposed indirect object is predicative.

Beside these there is the phenomenon of right dislocation, where a sentence or clause with a demonstrative *in situ* is followed by an apposition to that demonstrative: In the sentence *seni ïnča sävär män ayadakï yinčü mončok täg* 'I love you as much as jewels and pearls in one's hand' (KP 6,8), *ayadakï yinčü mončok täg* stands in apposition to *ïnča*. While, in this sentence, *ïnča* points forwards, *munï* in the following sentence points backwards: *munï körüp bodisatv, montag osoglug ärtökin, ... ärtiŋü korkdï sezinti* (Suv 630,10) 'He saw this, the *bodhisattva*, i.e. that this was the situation, and became exceedingly frightened ... and worried.'. In this second case, both the subject and the apposition giving semantic content to the anaphoric demonstrative are postposed. The reason here, again, is the strong emotional content of the passage (referring as direct object to the state of the prince sacrificing himself). In Devatā a2-3[617] we read: *nä antag äd ol [ag]uta t[akï katïgrak, nä antag] äd ol yalar otta käd örtäyür* etc., signifying 'What is such a thing that it is stronger than poison? What is such a thing that it flares up stronger than fire? ...'. Then (a10) *nä antag äd ol bïntaduta takï yumšakrak* 'What is such a thing that it is softer than silk?'. We here have three interrogative nominal sentences where the

[617] We quote two among four such sentences, the other two being even more fragmentary. The editor's reconstruction is based on parallelisms, on the answers to these questions (which are also, however, fragmentary) and on the Chinese and Sanskrit versions. The less likely analysis is to consider *nä antag äd ol* to be a complete nominal sentence and *yalar otta käd örtäyür* an asyndetic relative clause, similar to the analysis of the sentence *bo montag körksüz yatagma nä törlüg kiši bo* 'This (person) lying there in such an ugly way, what sort of a person is he?' offered at the beginning of this section: That would only have been possible under left dislocation. *yumšakrak* in a10 is an emendation for a word which looks similar but is not understandable.

attributes of *äd* are right-dislocated, leaving the cataphoric demonstrative *antag* as trace. The first and third right-dislocated elements are adjectives with satellites while the second one is a relativized sentence with no mark of subordination (as the conjuction *kim* would have been). Parallel mss. instead use other means of text organization, *nä antag äd bar* 'What sort of a thing is there ...' or *nä antag äd ol kim* 'What sort of a thing is it that ...'.

Now take *kišig .. yinik körtäči, nomug učuzladačïlar üčün, anïn burxanlar anta tugmaz; köŋülläri tar, kirläri täriŋ üčün kut bulmiš tüzünlär bo tïltagïn anta barmaz* (Ht V 100-106) 'Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their mind are narrow and their filth deep, for that reason *āryas* who have found blessing do not go there': The anaphoric elements *anïn* and *bo tïltagïn* echo the reference on the expressed causes for further prominence. Similarly in Ht III 665: *män sini nizvanï kadgu[larïn] tarkarïp arxant kutïn bulturgalï, anï üčün sürüp üntürdüm* 'To make you get rid of the passions of sorrow[618] and find arhathood – that is why I drove you away'.

Topics established as such in the text stretch preceding a sentence can be right-dislocated. Take *bo montag asïg tusu kïldačï üčün bo nom ärdini, anïn ol šloklarïg tükäl bititti* 'It is because this *sūtra*-jewel does this much good that he (i.e. the Chinese emperor) had those *gāthās* written out in full' in BT I A_2 19-21. The *sūtra* in question is mentioned (and praised) in l.4 (*bo kimkoki atlïg nom ärdini*), l.9 (*bo nom ärdini*), l.14 (*bo kimkoki nom*) and referred to with a zero anaphoric in l.17 (where the reader has to understand it to be the object of a verb). Then follows the sentence quoted above, where this reference is taken up with a noun phrase, placed in post-predicative position: In a sentence following upon one with zero anaphora, the author chose to take up explicit reference, but without putting the referential noun phrase into a position which establishes topicality.

In *"bar ärsär mäniŋ azkya ärsär ymä münüm kadagïm, ... eriŋlär münäŋlär" tep, "ätözdäkimin ärsär ymä, tiltäkimin ärsär ymä, köŋüldäkimin ärsär ymä"* (BT III 543-545) 'He said "If I have even the smallest of sins, ... criticise and chastise it, be it a sin of my body, of my tongue or of my heart." there is right dislocation of three locative satellites to 'my sin' (the binome *mün+üm kadag+ïm*); these satellites take up the possessive suffix of this latter. Interestingly, the accusative

[618] I do not think *nizvanï kadgu[lar* is either "Leidenschaften$_2$" as translated by Röhrborn or "acılar$_2$" as translated into Turkish by Ölmez; it is unlikely to be a binome as the meanings of the two words are too far apart.

form of the satellites echoes the function of the head as direct object, although that has nominative and not accusative form.

Question pronouns generally appear *in situ*; e.g. *mäniŋ kïzïm kanča baryok ol* (U II 25,21) 'Where has my daughter gone?'; *biz ikigüdä kanyusï küčlügräk biz*? (Wettkampf 43) 'Who among us two is the stronger?'. In rhetorical questions, e.g. *eliŋin törögin käm artatï udačï ärti* (BQ E19) 'Who could have harmed your realm and your system?'; *ellig bodun ärtim; elim amtï kanï* (KT E9) 'I was a nation with a realm; where is my realm now?'; *otsuz suvsuz kaltï uyïn, näčük yorïyïn* (IrqB 45) 'How should I manage, how can I live without grass and water?'; *muntada muŋadïnčïg nagü bolgay* 'What could be more wondrous than this?' (Maitr 26A r4). In the following sentence an interrogative pronoun in indefinite use is the sentence's subject: *kim kayu küsäsär Ketumati känttäki ... kutlug tïnlïglar ara ätizü olorup ašagalï, birlä olorup mäŋilägäli, ol kiši ädgü kïlïnč kïlzun* 'Whoever wishes to enjoy sitting among the blessed creatures of Ketumatī and to make music, to sit together and be happy, that person should perform good deeds'. It can then happen, as in this example, that it attracts the verb away from clause-final position. Even more so with real interrogatives with 1st or 2nd person subjects: *näkä täzär biz* (Tuñ 38) 'What are we fleeing from?'; *kämkä elig kazganur män* (KT E9) 'Whom am I conquering countries for?'; *nä üčün busušlug kältiŋiz?* (KP 4,5) 'Why did you come (back) saddened?'; *nägülük ölürür sizlär* 'Why do you kill?'; *nä tusu bolgay* 'What use will it be?'; *kanča bargalï sakïnur siz* 'Where are you planning to go? In DKPAMPb 840 a child addresses his father with a chain of five rhetorical questions, two of them with *mU* after the verb, two with left dislocation of *wh°* forms and one (marked by *ärki*) with the pronoun *in situ*; these are: *kanča bardï säniŋ burxan kutïlïg ädgü sakïnčïŋ? kimni üčün mini montag ämgätgäli bušï bertiŋ? yarlïkančučï köŋülüŋ kanta yitlinip bardï ärki?* 'Which way did your good thoughts linked to Buddhahood go? For whom have you given me as alms to cause me so much pain? Where did your pity disappear to, I wonder?'. In the following instance, finally, the nominalized topic is pushed out of initial position by an interrogative: *nä tusu bolur* (or: *bulur*) *ol ädgü kün, ol ädgü üd körmiši talulamïšï* (TT VI 23) 'Of what use will it be (to him) that he looked for and found out a suitable day and a suitable hour?'

If the verbal content is not predicative (i.e. not part of the 'comment'), the sentence can be clefted by putting the verb into non-finite form (here *äšidtöküm*): In *üküš tälim nomlarïg äšidtöküm yok ärti ... amtï yügärü äšidtim ... bo nomug* (Suv 670,14) 'There were many teachings which I had never heard; now I have listened to this

teaching (being preached) right before me' it is the negation which is in focus; the neutral expression would have been *äšidmädim*. In the following sentence the subject is in focus; for this purpose the particle *Ok* is placed after (and the adjective *yalaŋuz* before) it. The verb is made into a participle, turning the sentence into a nominal one, whereby the subject appears in the second half of the sentence: *anï biltäči yalaŋuz burxanlar ok ärür* (BT I D(14)) 'It is only the Buddhas who know that'. Take the sentence *ol yäknıŋ üstün täŋri altïn yalŋukta kim ärsär küčin tïdtačï yok* (TT X 104-106) 'There is nobody, neither among gods above nor among humans below, who restrains the power of that demon': *yäk*, 'the demon', is topic, brought to a position before the subject and thereby separated from its head. *yok* is shown to be the main predicate by the nominalisation of the verb, again changing a verbal to a nominal sentence pattern. In the following passage the clefting serves focussing on the identity of the subject: *kim ärti ärki bïčdačï ögükkyäm ät'özin? ... kim ärti ärki ölürtäči ögükkyäm čak sini?* (Suv 626,14-19) 'Who could it have been who slashed the body of my darling? ... Who was it, I wonder, who killed you of all people?'. *sizni sävmäkimiz montag ol* 'This is how we love you' (Ht VII 1880) figures a non-finite verb form to focus on *montag*: The variant with finite verb would presumably have been **sizni montag sävär biz*.

In *yeg ärdöküm ol* (E24,5) 'That is how I succeeded' and in *tirig oztum. kältöküm bo* (KP 61,1) 'I survived alive. Here I am' it is demonstrative pronouns which get the full predicative weight. A *-dOk* form is topic for a demonstrative also in *Kapgan xagan, Türk Sir bodun yorïdokï bo* (Tuñ II N3) 'This is how K. k. and the Turk (or: 'united') Sir people fared'. The following sentences with copula are construed similarly: *kaltï tül tüšäp odunmiš täg tiriltöküm bo ärür* (Suv 16, 15-16) 'This is how I came back to life, as if, e.g., I had dreamt and woken up'; *yerig tupulup yokaru ünmiši bo ärür* (Suv 644,4) 'This is how it pierced the earth and came up'. This construction lived on, with *-dOk*, in Qarakhanid: *oš käldöküm bo* is, in DLT fol.30 translated as 'I have just come': *oš* here makes the presentative element even more explicit. Interestingly, most of the *-dOk* forms are in the 1st person. In a lecture held in Frankfurt in November 2002, E. Skribnik documented this construction, with predicative *bo* or *ol*, from Tuvan and Altay Turkic.

The main clause in the following sentence was clefted to create a focus for the temporal adjunct: *ärtimlig ät'özüm ïčgïnsar män, kayu kün bolgay munï täg tükällig kiši ät'özin bulgum?* (U II 88-89) signifies 'When I lose my transient body, on which day will it be that I find a perfect human body like this one?' The unclefted version would

have been **kayu kün ... kiši ätözin bulgay män?* The writer's hope has been transformed into the projection participle *bul-gu*.

Definiteness or specificity do not as such appear to be expressed by case marking. That constituents appearing earlier in the sentence tend to be more definite, i.e. better known to speaker and hearer and more within the universe of discourse, is a universal phenomenon and no doubt correct also in this language.

4.5. *The structure of the participant group*

For the representation of relationships between entities participating in an event the language uses a number of different and interacting means: First of all there are the verb bases, each with a typical set of participant characteristics, i.e. what set of nominals they can govern and in which cases. Those governing direct objects are called transitive, those not governing direct objects intransitive, but one would need a much richer set of terms to classify verb bases in this way: Their government of other case forms (e.g. the dative) is also of high grammatical relevance. Moreover, some verb stems are associated with more than one government pattern, sometimes as linked to different meanings; in some of these cases, it can be argued that such a verb stem in fact represents more than one verbal lexeme. Still within the lexicon (and therefore not, strictly speaking, the object of this work but described in OTWF), any intransitive verb stem can, in Old Turkic, be turned into a transitive one by adding one of the seven causative formatives or formative combinations to it.[619] Secondly, the different diathetical suffixes added to the verb (including the causative suffixes) define distinctive grammatical sentence structures, especially if lexicalisation of these derived stems does not lead them to special meanings and away from sentence patterns characteristic for each one of them. Thirdly there are the governed nominals referring to the participants in the action, consisting at least of one word (unless we have zero anaphora pointing to some entity outside the clause as defined by the verb in question), which fall into semantic classes on one hand and, on the other hand, are characterised by case forms.

Zero slots can by the addressee be filled either from out of the context or through his world knowledge. See OTWF 785, 795-6

[619] The various causative suffixes are in complementary distribution for some of the stem shapes as defined phonologically, but not in all cases. They should be treated as separate suffixes both for this reason, and because their grammatical characteristics by no means overlap completely.

concerning the ellipsis of direct objects because of expected addressee knowledge in the military domain, the verbs *akït-, sekrit-* / *sekirt-* and *yor(ï)t-* taking 'horse(s)' as implicit object; they are thus used as intransitive verbs in spite of their causative shape. Similarly, Röhrborn 2000 states that the verbs *čökit-, bödit-, agrït-, täprät-, bälgürt-, ürkit-, bäliŋlät-, äŋit-, tolgat-* and the DLT's *yïlït-*[620] are used with the subject's body or a part of his body as implicit object. In a few cases this ultimaltely led to relexicalisation as an intransitive verb; in the corpus, the object does, however, resurface either when it has to be qualified by an adjective or for some contextual reason. The problem which we have with ellipsis is that, in the less common cases, it is not clear which lexeme should actually be the understood object: With the sentence *näčükin takï adkantačï biliglär ... ürkitgäli bäliŋlätgäli ugay* quoted by Röhrborn 2000: 270 from Ht, *ätözin* 'his body' is unlikely to be the implicit goal, as he thinks; with verbs signifying 'to frighten' the object should be less physical.

Passive sentences have verbs formed with *-(X)l-* or, in late Buddhist texts, *-tXl-* or *-tUrXl-*, getting the patient as grammatical subject. They usually lack an explicit agent; in later texts they are sometimes accompanied by a constituent referring to the agent, governed by the postposition *üzä*. See OTWF 691-93 and 699-700 for the syntax of verbs formed with these formatives. The normal earlier way of deriving passive verbs with explicit agent was to add to them the formative *–(X)t-* and put this agent into the dative case.

When one of the seven causative formatives is added to transitive bases, we have different constructions depending on what case forms the argument nominals governed by the verb are in; the different possibilities are discussed in OTWF 834-845. The instances involve agents or instigators, targets and, mediating between these, intermediate causees or intermediate agents, whose task may be seen as active (from the point of view of the target) or passive (from the point of view of the instigator).

-(X)š- verbs have two (groups of) participants (in plural) vying or cooperating with each other. They are often accompanied by the phrase *bir ikintiškä* 'one another', which appears as *bir ikintikä* in M I 9,9 and Maue 1996 44a v6; alternatively, they have one participant vying with (*birlä*) another, the parties being either direct or indirect objects of each other. The content of 'vying' is not *necessarily* linked to the use

[620] This has the secondary meaning 'to get fever'. Röhrborn 2000: 272 points out a similar development behind Turkish *kızdırma* 'fever' and the verb *üşüt-* 'to catch a cold'. Another such case is Turkish *sıtma* 'malaria', which comes from *ısı-t-ma*.

of *-(X)š-*; cf. *küčümüz bir ikinti birlä sïnalïm biz* 'Let us compete with each other in strength' (Wettkampf 41-43); DreiPrinz 119-120 has no doubt also been correctly completed as *[bir] ikinti birlä*. The cooperating or vying participants in an action are either both subjects, or one party is the subject, carrying out the action *with* or *against* the other. However, even in this latter case and when the subject is singular, Old Turkic (unlike Western European languages) puts the verb in the plural; *inim Köl Tegin birlä sözläšdimiz* (KT E 26), e.g., signifies 'I discussed the matter with my younger brother Köl Tegin'. One of the original meanings of the *-(X)š-* formative (retained to this day in Kïrgïz) may have been the expression of verbal plurality; thus e.g. in *bešinč ay üč yegirmikä kalïšdï* 'on the 13th of the 5th month they made an uprising' in Tariat S3, referring to the Türk tribes after getting vanquished by the Uygur confederation. See OTWF 578-583 for more details.

Verbs formed with *-(X)n-* are reflexive or middle (in which case they can govern direct objects) or anti-transitive (intransitive derivates of transitive bases); a number of them can be semantically characterised as having an abstract metaphorical meaning distinct from the concrete meaning of their base. See OTWF 634-639 for details on the syntax and semantics of *-(X)n-* verbs. Verbs formed with the rare and obsolete *-(X)d-* formative all show middle voice while all *-(X)k-* and *-lXn-* verbs (the first discussed in OTWF 650-51, the second in OTWF 641-42) are anti-transitive. Sentences need not have any of these forms to show middle content: *el[ig] bäg ... öziŋä olorgu äv etdürti* (Ht III 739), e.g. signifies 'The king ... had a house made for himself to live in'.

-sXk- forms sentences with the patient (a creature with a will of its own) as subject (like a passive) but (in a few examples) together with the accusative of some matter *by* which the subject suffers; see OTWF 705-6. All *-tXz-* verbs (as all *-sXk-* verbs) have transitive bases; they represent the subject as responsible for the action he undergoes, and get the active causee in the dative case; see OTWF 709 for the use of verbs formed with this suffix.

When a subject slot is not filled and no zero anaphor is in sight either, the subject can be 'any appropriate argument'; 'somebody' in the example *tämirlig olïgïn olïmïš osoglug* (MaitrH XVNachtr 4r25) 'as if somebody had wrung (them, i.e. foetuses in their mothers' belly) with an iron wrench': The verb *olï-* has no explicit subject. It would have been wrong to translate 'as if wrung with a ... wrench' as the verb was not passivized. In section 5.2 we deal with impersonal necessity, where the speaker / writer uses various means for expressing a directive he applies to anybody. The conditional does not need to fill

the subject slot either: *tužit täŋri yerintäki yïl sanïn sanasar tükäl tört mïŋ yïl ärtdi; yalŋuk sanïnča bögsär älig yeti kolti altï yüz tümän yïl ärtmiš ärür* (MaitrH X 1v10-12) 'If (one) reckons it by the years of the divine *tuṣita* country 4000 years all in all went by; if (one) sums it up by human reckoning 57 *koṭis* and 6 million years have passed'. Using *tep tesär* 'if one says' is a very common strategy for asking rhetorical questions then answered by the author himself; 'one' here represents a variable.

Such non-reference to subjects happens also with finite verb forms, as with *tägir* in the following passage: *ol yolča barïp arïtï sansardïn ozgalï bolmaz; kayu üdün bo tüzün yolča barsar temin ök ugramiš ürüg amal nirvan balïkka tägir* (MaitrH Y 328) 'Going by that way it is quite impossible to get free from *saṃsāra*; when one takes this righteous way, one reaches straightway the intended eternal peaceful city of *nirvāṇa*'. As Zieme 2000: 67 points out, alternative readings in Chinese-Uygur bilinguals are often introduced with the words ... *ymä ter* 'One also says ...'. Further instances where slots opened by finite verbs are left empty are mentioned in section 4.32.

4.6. *Clause subordination*

The transformation of verbal clauses to sentence constituents is mostly taken care of by morphology, i.e. through the replacement of finite and other predicative verb forms by participles and converbs. These appear to have been the only means available to the language of the inscriptions, beside the use of *te-yin* and *te-p* in the creation of causal and final clauses within a direct speech strategy. In Uygur, however, conjunctions such as *kim* also have important tasks, and that dialect conglomerate makes much use of pronouns such as *kim* 'who' (sometimes joined to verb forms in *-sAr*) in subordinating. The predication of a subordinate clause can fill the task of any of the constituents of the main clause except the verb; we shall here deal with these tasks under three headings: adnominal, nominal and adjunct.[621] All loose forms of juncture are dealt with in section 4.8.

4.61. Clauses in adnominal tasks

[621] Sections 4.61, 4.62 and 4.63 thus roughly correspond to the tasks of adjectives, nouns and adverbs. The term 'adjunct' has a wider sense than 'adverbial', since adjuncts and adjunct constructions can qualify not only verbs but also whole clauses.

Old Turkic has basically three different types of attributive relative constructions: left-branching constructions built around participles, right branching ones that are introduced by particles, and relativisation which makes use of correlative pronouns, where the head *can* be *within* the relative clause. The first type, here called synthetical, is described in section 4.611, the second, which we call analytical, in section 4.612. Correlative relativisation is described in section 4.65. The heads which relative clauses qualify refer to constituents (action participants or circumstantials) of these as well as being constituents in the matrix clause; this is why they get deleted from both synthetical and analytical relative clauses: They do not, however, get deleted from the subordinate clauses within the correlative relativisation construction. Finally we have headless relatives (dealt with in section 4.62 with subsections) themselves referring to such participants or circumstantials.

Sometimes the qualifier clause denotes the action as a whole and not one of its participants; in this case it is not a relative clause. When the head is not a participant in the action described by the subordinated verb, nothing gets deleted even though the subordination is effected by synthetical means. Two such simple examples are *ölürmäk sakïnčïn* (TT IV A 29) ‚with the intention of killing‘ and *bo nom bititmiš buyan ädgü kïlïnč* ‚this meritorious deed (consisting of) having had the *sūtra* written down’, which show an infinitive and an action nominal in *-mIš*. In the first of these the action is not meant to be linked to any particular subject; in the second the subject of *bitit-* is the person who commissioned the copyist’s work. In the first case, ‘killing’ is the content of the thought which the word *ölürmäk* qualifies, whereas, in the second instance quoted, the ‘having written something’ gets defined as *puṇya* (= *buyan* = *ädgü kïlïnč*) or the source of *puṇya*. Such verbal nominals can also be accompanied by reference to the subject, which is in the nominative in the following instances (both with *-mAk* forms): *bokün{ki} künkä tägi mogočlar otka tapïnmak tïltagï bo ärür* ‘this is the reason for the Magi’s worshiping of fire to this day’ (U I 9) or *činäk keginč bermäki nom* ‘the text of Chandaka’s answering’ (a Manichæan book title in ChristManManus p. 1208). In the following expression, reference to the subject of the subordinated perfect participle can be found in the possessive suffix added to the head of the construction: *anaka ataka yazmïšnïŋ ayïg kïlïnčlarïmïznï* (BT XIII 12,76) ‘our evil deeds (consisting of) having sinned towards mother and father’; unlike the other examples I have come across, the satellite is linked to the head by the genitive. For the content cf. *čaxšapat sïmïš tankarïg ïdmïš yazoklarïm* ‘my sins of having broken precepts and

having relinquished vows' (TibBud 46). In *amtï köŋülüŋdäki nä busušuŋ sakïnčïŋ ärsär mini körmiš sävinčkä ïrak tarkargïl* (TT X 136) 'Get rid of any sorrow or worry there is in your heart through the joy of having seen me' the subject of *mini körmiš* (the satellite) is inherited from the main verb, a 2nd person imperative. In TT X 520-521 the reference is explicit in the anaphoric use of the genitive form *anïŋ* which also qualifies the head: *anïŋ öŋrä ažuntakï ... täŋri burxan nomïn äšidmiš tïŋlamïš ögrätigi üzä bo šlok nom köŋülintä kälti* 'Through his experience (*ögrätig*) in a previous existence of ... having heard and having listened to (*äšidmiš tïŋlamïš*) the teaching of the divine Buddha, the following doctrinal verse came to his mind:'. *yarokïn biziŋärü kälürdi ärsär, biz adrok adrok etip yaratïp nomka kigürsüg törö bar ärti* (Xw 167) 'There was the rule that, whenever he conveyed his light to us, we (in turn) were supposed to prepare and organize it each in its special way and to introduce it to religion' is an instance where the verbal noun *kigür-süg* (< *kigür-* 'to introduce') is accompanied by a nominative subject, *biz*. In *ävirtgäli ötünmiš ötügiŋä* (BT II 114) 'upon the request of ... to have (the *puṇya*) deflected' the head and the qualifying verbal form happen to be etymologically related; English *request* is able to govern a phrase such as *to have it translated* but in Old Turkic *ötüg* had to be qualified by *ötünmiš*, a form less nounier than *request* to govern the supine in *-gAlI*.

In *säŋir tüpintä ulug taš üz[ä bur]xan oloru yarlïkamïš ïz ol* (Ht III 974) 'On a large rock at the foot of a promontory there is (*ol*) the mark of Buddha having sat there', *ïz* 'trace' is not a participant or a circumstantial of the action of Buddha's sitting but its result. I am not aware that 'result' can be expressed as a circumstantial in Old Turkic; if that were possible, this particular *-mIš* clause would also be a relative clause. I take this to be the criterion distinguishing between relativisation and qualification by clauses referring to the action as such, in any case holding for the instances mentioned in the previous paragraph.

Synthetical relative clauses precede their head while analytical relative clauses follow it. In the following example there is, exceptionally, a right-branching synthetical relative clause (with *sözlädäči* 'pronouncing' and *tutdačï* 'upholding'): *kim kayu tïnlïglar, bo ïdok darni nomug sözlädäči tutdačï, ögüzlärdä köllärdä ulug taluy ögüz ičintä suvka kirip yunsarlar, ...* (DhāSū 28) 'If any creatures reciting and upholding this holy incantation get into rivers, into lakes or into the sea and wash, ...'. This instance can also be considered an apposition. In the following sentence there is an analytical relative clause introduced by *kim* and following its head: *bar mu ärki antag*

tïnlïglar kim bo nom ärdini tïltagïnta bo ok közünür ažunta ädgü tüškä tägdäči (Suv 2,16, the introduction) 'I wonder whether there are such creatures as attain good results (i.e. achieve their goals) right here in this visible world because of this *sūtra* jewel'. What is here being relativised is not a finite verb as generally in analytical relative clauses, but a participle without a copula. This is also rather rare but not as rare as right-branching participles without *kim*. It may not be a coincidence that the forms in both passages are *-dAčI* participles, as there may have been some reminiscence of *-dAčI* in finite use, as in Orkhon Turkic.

4.611. Synthetical relative clauses

Old Turkic relative clauses are usually built around participles. However, *ärgürmiš kïzïl bakïr ičürmäklig ... tamu* (BT II 468) 'the hell where they give (people) red-hot melted copper to drink' is a synthetical relative construction although one would not call the *-mAk+lXg* form (discussed in OTWF pp. 153-5) a participle. Relative clauses qualify nominals referring to one of the entities involved in the event being described (in the instance just quoted, e.g., the entity is 'place'). We can thus classify them according to the task of the head nominal in this event.

1) Orkhon Turkic examples for relative clauses qualifying the relativised verb's subject are *körür közüm* 'my seeing eyes' (KT N 10), *igidmiš xaganïŋ* (KT S9) 'the ruler who has taken care of you', *öltäči bodun* 'the people who were going to perish' (KT E29). Further, Uygur *täprämäz kamšamaz ornaglarï oronlarï* (BT V 189) 'their immobile and unshaking abode' and *sävär* in *ïčgïnmiš män känčimin, sävär amrak atayïmïn* (Suv 626, 16-17) 'I have lost my baby, my dear loving chick!'. One would not say that *seeing* in English *my seeing eyes* is a relative clause, though *which see* in *eyes which see* would qualify as one. Our practice concerning Turkic is to call any attributive participle a relative clause, since the distinction between these and even elaborate relativizations is gradual and fuzzy. In *bir bilgä nom bilir är* (KP 14,3) 'a wise man who knew[622] the doctrine' the participle has the object *nom* but the bracketing could also be (*nom bil-*)-*ir*. With *-yOk* we have e.g. *övkä köŋül örítmäyök tïnlïg* ,a creature which never let itself get into an angry frame of mind' (U III 42,13); cf. the common phrase *köŋül örit-*. In *üč yäk savïn sïmaglï ... tärs azag nomlaglar* (M III nr.12 r3) 'the … propounders of heretic doctrines, who do not

[622] This is how we *have* to translate *bilir* in this sentence and *öltäči* in the previous one, since the main verbs are in the past tense.

contradict the words of the three demons', the *-(X)glI* participle is negated. *ol törötä yïgïlmïš näčä kišilär ärti ärsär* 'All the people who were assembled at that ceremony ...' (Suv 5,8-9) has a relative clause with *-mIš* qualifying its subject.

2) In *yagï alkïnmïš yula* (Maitr 103v11) 'a beacon whose oil has been consumed' and *közi körmäz kiši* (MaitrH XV 8r25) 'a person whose eyes do not see' the possessive suffix added to *yag* 'oil' and to *köz* 'eye', the subjects of the relativised verbs, refers to the heads, showing that they (i.e. *yag* and *köz* respectively) in some way or another 'belong' to these heads (*yula* and *kiši* respectively): These are examples for the *bahuvrīhi* construction with participles in the adnominal predication. The eye is, of course, an inalienable part of a person's body, and oil was a necessary and commonly known ingredient of oil lamps.

3) Participles can also be used for relativization when heads are direct objects. In the following two clauses, the subject *türk bodun* is supplied both from the matrix clause and from the possessive suffixes added to the heads: *türk bodun ellädök elin ïčgïnu ïdmïš, xaganladok xaganïn yetürü ïdmïš* 'the Türk nation let their realm, which they had created, slip away, and lost their emperor, whom they had crowned' (KT E 6).

When the relative clause is to refer to 1st and 2nd person subjects of the relativised verb, the reference is normally effected by a possessive suffix on the head, e.g. in *aydok isäŋäz(i)n tükäti islädämäz* (M I 10,13) 'we have fully carried out the task you told us to do'. In *künkä ašadokumuz beš täŋri yarokï* 'the light of the fivefold god which we absorb during the day' (Xw 201) however, the subject appears as a possessive suffix on the verb form.

Rarely, early sources use *-mIš* forms also for perfect relativisation: *äčümüz apamïz tutmïš yer suv* (KT E19) 'the territory which our ancestors ruled'. In Manichæan sources this happens only when there is to be no explicit reference to the subject: *etmiš yaratmïš tatïglïg aš* 'a well-prepared and tasteful meal' (runiform ms. TM 342 1 r4-5, KöktüTurf 1056); *sizlärdä almïš agu xormuzta t(ä)ŋrikä atgay m[än]* (M I 19,15) 'I will shoot the poison taken from you at the god Ohrmizd'. In *sözlämäsig irinčülüg söz* 'a loathsome expression not to be uttered' (Xw 198) the head is also the direct object of the verb; here the meaning is not factive but prescriptive, since *-sXg* is a projection participle. The subject of *sözlä-* not being retrievable from the context, we take it that the 'utterance' should not, according to the speaker, be

uttered by anybody. In the previous sentence, the poison could have been taken (*al-*) by the subject / speaker or by an assistant.

Buddhist Uygur uses *-mIš* for perfect relativisation also *with* subject. In the following example the subject marking is on the head (as in the *-dOk* instance quoted from M I 10,13 above): *mäniŋ kolmiš kut+um bütmäzün* 'May the blessing for which I prayed not materialize (if ...)' (T II S 21 a = U 261 v5, a Buddhist fragment with Manichæan punctuation quoted in the n. to BT V 426; there mistranslated). This is presumably in analogy to cases such as *mäniŋ ašnukï ažunta kïlmiš öz kïlïnč+ïm* (TT VI 15) 'my own deed which I committed in a previous life', where the deed or sin is the subject's sin. Cf. also *täŋri tavgač [elig]niŋ yaratmiš swösin* (Ht VII 18) '(He read out) the preface which the divine Chinese emperor had composed'; the emperor is the author, i.e. the subject of *yarat-*, but one could also say that the preface was 'his' preface. In *bo ogul sutmaknïŋ bermiš ašïn yep aymiš išin kïlïp ...* (SUK Ad3,6) 'This son (should) eat the food which S. gives (him) and carry out the work which he tells (him to do)', on the other hand, the food and work are Sutmak's, in another sense the boy's.[623] When subjects are in the nominative the head does not necessarily have the possessive suffix: *täŋri täŋrisi burxan yarlïkamiš ... ïdok darni* (TT VI 02) ‚a holy formula decreed by Buddha the god of gods'. There are cases, finally, when the head has no possessive suffix even when the subject is in the genitive case: *ol künki biziŋ ašda ölürgüči ud koyn toŋuz bašlap tünlïglar* (Suv 6,13) 'creatures, mainly bovines, sheep and pork, which we had intended to slaughter that day at our meal'; *braman burxanlarnïŋ yarlïkamiš bir šlok nomug ača yada sözlädi* (U III 36,1) 'The brahman recited and interpreted the didactic poem which the Buddhas had decreed'.

4) In *ayančaŋ köŋülin yüküngü ... kaŋïm mani burxan* (Pothi 2) 'my father the prophet Mani, to be worshipped with reverence' the head is the indirect object of the verb *yükün-*.

5) *n(ï)gošaklarnïŋ suyïn yazokïn öküngü xwastwan(i)vt* (Xw 221, ms. B) 'The Xw. (with) which the auditors are to repent their sins'; *uzlangu äd* (M I 17_1) 'the material to carry out one's craft' or *alŋadturgu sakïnč* 'meditation by which to weaken (bad influences)' are instances of relative forms used for qualifying kernels which refer to their instrument. *bo kišiniŋ ätözin yumiš suv* (DhāSū 31)

[623] Note that reference to the subject of the sentence is deleted from the two relative clauses, where there is zero reference to the indirect object.

signifying ‘the water (with) which this person washed his body’, the head *suv* is the instrument of washing (*yu-*) and not its subject; the person referred to as *bo kiši* is the subject of the superordinate clause.

6) The head is often the place where the action or event described by the adnominal clause takes place. In inscriptional *el tutsuk yer* ‚the place to rule the realm from‘ (KT S 4), Manichæan *bo tugar ölür yertinčü yersuv* ‘this world in which one gets born and dies’ (M 126 + M 502m + M 201 quoted in the note to BT V 217) or Buddhist *ölüg kämišgülük ... [ay]ïg oron ol* (Ht III 721) 'It is a bad (?) place, (used) for deposing corpses' there is no explicit subject, though one might consider the rulers of the Türk empire to be the implicit subject in the first example. In *ötrö olormïš oronïntïn örü turup ...* ‚Then he stood up from the seat he had been sitting on, and ...‘ (TT VI 011) and *käntü öznüŋ olorur oronïn kötürü turur* (BT VII B44) ‘he keeps lifting the seat on which he is himself sitting’ there is reference to the subject in the possessive suffix added to the head. *zrušč [burxan] ärtöki yerdä* ‚at the place where Zarathustra stayed‘ (ManUigFr p. 401, 10), on the other hand, has an explicit nominal subject in the nominative; the pronominal reference to this subject is on the verb and not on the head (cf. the expression quoted under (3) from Xw 201). *[ana]nt arxant ... ötrö olormïš orontïn turup ...* (Ht III 678) ‘The *arhat* Ānanda ... then got up from where he had been sitting and ...’ is very similar to the TT VI and BT VII passages just quoted, but shows no anaphoric reference to the subject (Ānanda) either on the *-mIš* form or on the head, as appears to be usual with local heads. In runiform inscriptions the possessive suffix is wholly absent when the reference exists but is made superfluous by the context: *sančdok yer* ‚the place where (we) routed (them)‘ (ŠU W7); with a 2nd person subject, *bardok yerdä* ‚in the places where (you) went‘ (KT E24 = BQ E20); *täŋri yarlïkadï, yañdïmïz ... yañdok yolta ymä ölti kök* (Tuñ I S9) ‘God ordered (so, and) we dispersed (them) ... those whom (we) dispersed died right on the road’.

7) In *yanmas yerdä oztumuz* (M III nr.16 v3) ‚We escaped the place of no return’ the head is the source of the activity described by the verb, the place *from* which no creatures come back. *tugmïš atamïz* (BT XIII 5,7-8) ‘our real father’ literally signifies ‘the father from whom we were born’: The father is the source of the event (unless one wants to reduce fathers’ task at reproduction to instrumental function).

8) In *ozgu kutrulgu yol* (Pothi 63) 'the way to salvation', *t(ä)ŋri yeriŋä bargu ... yol* (Pothi 72) 'the way by which to go to the land of gods' and *bošungu yol agïngu šatu* (M III nr.1 IV v14-15) 'the way to freedom and the ladder for rising' the head is the way by which one reaches a certain destination; this is in Old Turkic generally expressed by the equative.

9) The head can refer to the time of the event; with perfect participle: *ïdok elig ulušug agïr basïp oronka olormïš tokuz yegirminč yïlïnta* (DKPAMPb 29-30) 'in the 19th year of his having subdued the divine nation and country (*el uluš*) and of having acceeded the throne.' With imperfect participle: *yïlïm yašïm adïrtlïg bilmäz üdtä* (Ht VII 331) 'at a time when my age was one in which I did not perceive matters clearly'. The necessitative *-gU* and *-gUlXk* forms qualify terms referring to projected time; e.g. *yula tamturgu künlär* (TT VII 40,112) 'the days on which one is to light a torch' or *amtï maŋa burxan kutïn bulguluk üd yagumïš ärür* 'Now the time has come near for me to attain Buddhahood' or 'the time when I should attain Buddhahood is near'. In *bodisavtnïŋ taloy ögüz ičintä ingülük üčünč küzäd üdtä* 'in the third watch, during which the *bodhisattva* is to descend into the ocean' (MaitrH XV 6r24), the subject appears with the genitive suffix, not taken up by any 3rd person possessive suffix (the Maitr is one of the earliest Buddhist Uygur texts). In the following example in which *-gUlXk* again qualifies *üd,* reference to the subject is handled in still another way: In *ol tïnlïglar kälgülük üdintä* 'at the time when those creatures were expected to come' (Suv 19,19) the subject is referred to both by a nominal phrase in the nominative and by the possessive suffix on the head.

In some of the examples quoted, the 'possessive' suffixes added to the heads may be either possessive or agentive. In *aydok isäŋäz* 'the task you told us to carry out', *mäniŋ kolmïš kutum* 'the blessing for which I prayed', *ol tïnlïglar kälgülük üdintä* 'at the time when those creatures were expected to come', *oronka olormïš tokuz yegirminč yïlïnta* 'in the 19th year of his having acceeded the throne' or *tirilmiš tïltagïm* (Suv 5,8) 'the explanation for my resurrection' reference to the subject is effected by possessive suffixes on the head. In *künkä ašadokumuz beš täŋri yarokï* 'the light of the fivefold god which we absorb during the day' and *zrušč [burxan] ärtöki yer* 'the place where Zarathustra stayed', on the other hand, the possessive suffix added to the *-dOk* forms refers back to the subject. Among the modern Turkic languages, Turkish and (in the 1st and 2nd persons) Azeri as well as Tuvan place an

agentive possessive suffix onto the end of the relative form (as in the two examples quoted last) while others join it onto the head. Still other Turkic languages (among them again Azeri, though only in the 3rd person) express pronominal subjects by independent pronouns only.

When an adnominal construction has a projection participle as kernel, it can express necessity. With *-gU*: *yula tamturgu künlär* (TT VII 40,112), e.g., is 'the days on which one is to light a torch'. Similarly with the *-sXk* / *-sXg* form in *sözlämäsig irinčülüg söz* 'a loathsome expression not to be uttered' in Xw 198 or in *el tutsuk yer* 'the place to govern (from)' in KT S 4. There is no reference to any particular subject in these examples; the utterance is meant to refer to any. The attributive clauses of these constructions are relative clauses, qualifying time, direct object and place respectively.

There could possibly be nominal, i.e. verbless left-branching relative clauses. One border instance is *kunčuylar taysïlar bašlagučï [u]lug kičig kam(a)g bodun* (TT II,1 64) 'the whole nation, both big and small, (with) princesses and princes as (their) leaders': The *-gUčI* form is not a participle but a deverbal noun, which does, however, govern direct objects (see section 3.113); to translate the relative clause as 'led by princesses and princes' would therefore be less correct. Still, if the nominal clause in adnominal position had had a purely nominal (i.e. not deverbal) predicate, the *bahuvrīhi* construction (discussed in section 4.122) would have been used instead. The attributes *bö+kün bar* and *yaran yok* in *bökün bar yaran yok bäksiz mäŋüsüz ät'öz* 'the fickle and transient body which is here today and gone tomorrow' (Gedank r12) are like verbless relative clauses in consisting, respectively, of the deleted subject *ät'öz* of temporal adjuncts and of the predicates *bar* 'existent' and *yok* 'non-existent'.

4.612. Analytical relative clauses

Post-inscriptional Old Turkic has an additional, right-branching relativisation strategy, using the particle *kim* (rarely *kayu*).

1) In most cases the head of the relativisation serves as subject in the subordinate clause. In the following Christian instance both relative clauses are adjacent to their heads, the first instance preceding the direct object: *oxšayur sän ... ol ingäkkä kim ïraktïn üntädi öz buzagusïŋa kim azïp barmïš ärdi* (ChristManManus, Christian ms., r 12-14) 'You resemble that cow which called from afar to her own calf, which had gone astray'. The instances *ot kim ïgačdan ünüp y(e)nä*

ïgačag örtäyür ... kïsgač kim käntü ol ok tämirän etilmiš ol ... tonnuŋ biti kim kišinäŋ tärisintä ünüp y(e)nä kišinäŋ kanïn käntü sorar 'fire which emanates from wood and again burns wood ... tongs, which are themselves made of iron ... the louse of clothing which comes out of people's skin and again itself sucks a person's blood' are found in one Manichæan source in M I 7-8. Further such *kim* clauses appear in ManUigFrag r1, DreiPrinz 91-2 and 111 and M III nr.7 III r11-12. In the following Manichæan sentence (M III nr. 6 II r3) both the synthetic and the analytical relative clauses appear inside the main clause: *ol ašanmïš aš kim ol ät özintä kirür ölür* 'The eaten food which enters that body dies'. There is another such instance in M III nr. 7 I v9-10. Reference to the antecedent need not get deleted when the relative clause is nominal; the postposed *ol* here refers back to 'place': *alkatmïš yer kim kamag täŋrilärniŋ bäk katag täprämäz kamšamaz ornaglarï oronlarï ol* (BT V 188) 'the blessed place which is the strong and solid, immobile and unshaking abode of all the gods'.

In the following sentence *kayu* 'which' is used as relative pronoun, the head consisting of a binome of participles used nominally: *kim ärdi ärki bo bütün yertinčü yer suvdakï alku alplarïg utmïš yegädmiš kayu bo yavlak sakïnčlïg yäkniŋ pavanïnta korkïnčsïz kirip kälti* (TT X 253) 'Who might have been the one who overcame all the heroes in this world, who fearlessly entered the bedroom of this evil-thinking demon?' The reason for the use of *kayu* in this sentence may possibly have been the fact that it starts with interrogative *kim*, and the writer felt that the relative particle might have been mistaken for that.

There is a construction with *yok* 'there isn't' in which the verb appears in the conditional form: *tïnlïg oglanï yok kim mäniŋ ögüm kaŋïm ... bolmadï ärsär* (MaitrH X 2r1) '(In the whole of *Saṃsāra*) there are no humans unless they be such as became my mother, father ...', i.e., to put it more simply, all human beings became my mother or my father (in one of their previous existences). Similarly *bo yer üzä näŋ andag t(ä)v kür yälvi arviš yok kim ol umasar* (M II 5,10) 'There is no such trick or magic or incantation as he would not be capable of'; *anta adïn tïnlïg yok kim mäniŋ töpömdäki sačlarïg tutgalï usar* (U IV A 184-6) 'There is no creature other than that one which would be capable of getting hold of the hairs on my head'. Another example appears in TT IV A 23-24 and additional ones are quoted further on in this section.

In the following Manichæan example (M I 17,8), as well as in Suv 610,17 or 616,3-5, the relative clause is not adjacent to its head but follows the complete main clause; this would be impossible with participial relativisation: *ol azïŋ kim taštan aška ičgükä katlap ärür ...*

ičräki az birlä katalur, kim erkäkli tišili ät'özintä ärür 'That lust of yours, which is mixed with external food and drink, ... gets mixed with internal lust, which is present in male and female bodies'. Similarly in TT VI 253, *ötrö bo yertinčüdäki ulušïn balïkïn etä berürlär, kim ayïg kilïnčlïg ... tïnlïglarïg eyär basar* 'Then they (i.e. the rulers, who are in fact *bodhisattvas*) organize their state in this world, which suppresses evil-doing and … persons', and BT V 175, *täŋri kirkïnlarïn täŋri ogulanlarïn alkamïš törütmiš ol, kim ol örginniŋ özin täg ortosïn täg ... bolup tururlar* 'He has created the divine maidens and divine youths, who have become as the heart and center ... of that throne'.

ögi kaŋï antag ögäk sav sözläyü umagay kim ol äräŋ köŋlin yarotsar (M I 15,3) 'His parents will not be able to say any such considerate words as might brighten up that man's soul' is another (Manichæan) example where the relative clause is not adjacent to the head. The subordinated verb is not an aorist, as in the examples quoted in the previous paragraph; it is a conditional form, as in the paragraph before that, where the main clause has the element *yok*: The meaning of the main clause is here similar to that, since what is here denoted is the absence of 'loving words'. This subordinate clause can also be understood as consecutive (section 4.637), then to be translated as '... words so considerate that they could brighten ...'; the translation in Doerfer 1993: 34 is unacceptable.

2) In the examples discussed under 1) the *kim* clause is used for subject qualification. In the following example, however, the head (*ädgü*) is the indirect object of the relativised verb (*tägmä-* 'not to attain'): *täŋri täŋrisi burxannïŋ ädgü ögli köŋüli tägmiš iši küdügi üzä yok antag ädgü kim tägmägülük* (HtsPar 14 r22) 'Through the activity reached by the benevolence of Buddha the god of gods, there is no such good as one cannot expect to attain.' Note that here, as in the last example mentioned, the antecedent is qualified by *antag* 'such'; unlike that instance, however, this subordinate clause cannot be understood as having consecutive meaning. Thus also in the following instance, in ms. T I D 200 l.18:[624] *näŋ antag yer yok kim lušyanta özi tolu yok ärsär* 'there is no such place that L. himself should be wholly absent (from it)'. In this case the head is the place for which the content of the relative clause is said to hold; other examples of *yok* + relative clauses with the *-sAr* form have already been mentioned.

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[624] Quoted in the n. to TT V A 23. This is an early text, as it has twice *kanyu+garu* where later texts have *kayu*, twice the *-(X)glI* participle and /z/ is in some cases spelled with two dots.

In *öŋ sakïnïŋ ol ozakï sav yörüglärin kim män sizlärkä ayu bertim* (M III nr.7III, 15,11$_1$) 'Remember and think about those previous explanations of matters which I was so nice to tell you' the *yörüglär* are direct object both of *ö- sakïn-* in the main clause and *ay-* in the relative clause. In ZiemeWind 16-18, another Manichæan source, the head also serves as direct object of the verb (*tep okïyurlar*) in the relative clause: *yïl sayu ol ay bälgülüg ärür kim ï ïgačïg kamšatïglï ... yeltirär ay tep okïyurlar* 'Every year there appears that month which they call the windy month (lit. 'the month in which the wind blows, *yeltir-*), which shakes and ...-es the bushes and trees'. In ZiemeWind 40-41, the head *isig suvug* appears in the accusative, the case form which it would have if it were part of the relative clause, and not the nominative, corresponding to its task in the matrix clause: *ïnča kaltï isig suvug, kim tumlïg suvka katsar, ötrö ičiglikä yarašï säviglig bolur* 'just as warm water, which one adds to cold water, becomes agreeable to the drinking (person)'.[625] A perhaps late note on the reverse of a Sogdian ms.[626] reads *bo bitig ärsär el körmišniŋ bitig ärür kim m(ä)n kiz čun alt(ï)m* 'As for this text, it is the text of El Körmiš which I, K. Č., have received'; this instance also has the relative clause qualify the direct object of the relativised verb. In Qarakhanid *bo söz kim sän aydïŋ bagïrsaklïg ol* 'The words you uttered are compassionate' (QB 3335) the head is also the direct object while, in *bo kün mä kim ädgü atansa kiši* 'and (*mä*) this day (on which) a good person may be nominated' (QB 253, again with a conditional) the head has time reference.

The head of the following instance refers to the father of the direct object (*kïz+ïn*) in the relative clause: *öz kadïnï yeriŋä tägdi, kim kaŋï xan kïzïn ädgü ögli teginkä kolmiš ärti* (KP 64,3) 'He came to the place of his own father-in-law, whose daughter his own father had asked (in marriage) for the Good-Wishing Prince'. The exact relationship between the two clauses is made clear by the possessive suffix in *kïzïn*.[627]

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[625] Cf. l.48 in the same text: *ïnča kaltï tumlïg suv, kim isig suvka katsar sogïtïr* 'just as cold water which, when one adds it to warm water, cools (it)' (translated rather freely by the editor). Alternately, *kim* may have been introduced in analogy to other sentences in the context; without it, the clause signifies 'just as, when one adds warm water to cold water, it becomes agreeable ...'.

[626] Zieme in a review by Sundermann in *BSOAS* 40(1977):635, reviewing a text collection by McKenzie. Zieme says that the note is late because the second *bitig* appears without possessive suffix; that phenomenon is discussed in section 4.121.

[627] Note that the 'daugher' has to precede the 'prince's father' in the English translation but not in its Uygur counterpart.

In *antag bar kim ol tïnlïg örtkä örtänmäz* (TT VI 114-5) 'There is such a thing that that creature is not burned by fire', finally, the main clause is an instance of the existential construction. The subordinate clause qualifies the pronoun *antag* 'such a one' inasmuch as pronouns can get qualified by relative clauses; one could perhaps also consider the *kim* clause to be used in apposition. The similarity of the TT VI 114-5 sentence with the following two, both from other early texts, may be superficial if I understand it correctly: *... öŋiŋärü kälürdilär. y[mä] antag bar ärti kim altï, ymä antag bar ärti kim berdi* (DreiPrinz 115-6) 'they brought (the presents) before him. There were such that he took and such that he gave';[628] *ymä antag bar ädgü ögli ol; antag bar nomug taplaglï kišilär* (M III nr. 6 Iv11) 'So there are people who are compassionate and there are people who advocate the (true) doctrine'.

By content, sentences like *ol täŋri urïsï ... tavranu kayutïn sïŋar täŋrilär eligi xormuzta täŋri ärsär, antïn sïŋar yakïn barïp ...* (U II 29, 19-21) 'that divine boy hurriedly went into the direction in which the god Indra, the king of kings was', described in section 4.65, contain relative clauses as well, but they use the correlative strategy.

Analytical causal (section 4.635) and consecutive (section 4.637) clauses also get introduced by *kim*, and there are cases (e.g. one in M I 28,21) where relative and causal or consecutive interpretations are both possible; I take causal and consecutive *kim* to come from relative *kim*, in that the implicit motive for introducing relative clauses is often that they justify the content of the main clause.

The particle *kim,* absent from Orkhon Turkic, might come from the interrogative-indefinite pronoun *käm, kimni* etc., whose nominative has the shape *kim* in Uygur. In the following sentence, both a particle and a pronoun reading would be possible, which might show us how the word for 'who' might have come to be used for this purpose: *tün sayu ... montag sakïnč kïlsar, alku tïnlïglar bo dyan sakïnčlïg kišig kim körsär, burxanïg körmiš täg sävär taplayur ayayur agïrlayurlar* (TT V A 113) 'If he meditates in this way every night, all creatures, whoever sees (or, with *kim* as relative particle, 'all creatures who see') this meditating person, will love, appreciate and honour (him) as if they had seen Buddha'. In the first reading the subordinate clause stands in apposition; the second reading leads us to a correlative construction of the type described in section 4.65. Note that the element *kim* is not at the beginning of the clause it serves, since the object *bo dyan sakïnčlïg*

[628] There is a king both among the guests and among the hosts, so that an exchange of presents would be normal.

kiši+g precedes it. If this etymology is correct, *kim* might originally have been used exclusively for human antecedents. The idea that the particle *kim* comes from *kim* 'who' gets support from the instance in which *kayu* 'which' is used for relativisation (quoted under (1) above from TT X), as this is also an interrogative-indeifinite pronoun. Note that the scope of English relative *which* for antecedents is also narrower that its scope as interrogative pronoun.

4.62. Complement clauses

In Uygur there are different strategies for putting clauses into participant tasks of matrix sentences. Most Old Turkic clauses serving as nominals in participant tasks are headless relative clauses. We will, in what follows, classify headless relative clauses as well as infinitive constructions by the case tasks they fill in the matrix sentence, then make a sub-classification by the function which they have with respect to the subordinated action. Rarely, interrogative-indefinite pronouns are used as heads for such clauses or as relative pronouns, resulting in structures similar to English: *nä ädgü kïlïnč kïlmïšïn*[629] *maŋa nomlaŋ* (HamTouHou 1,9) 'Tell (deferential) me what good deeds he carried out'. This differs in content from both**kïlmïš ädgü kïlïnčïn maŋa nomlaŋ* 'Tell me the good deeds that he carried out' (the structure described below in this section) and *nä ädgü kïlïnč kïlmïš ärsär (anï) maŋa nomlaŋ* 'Tell me whatever good deeds he carried out' (the correlative construction expressing a generalising type of relativisation, section 4.65). The subordinate clause in the Araṇemi-jātaka represents the object of *kïl-* and serves as object of the main clause. In what follows the subordinate clause represents the object of *sakïn-* but serves as subject of the main clause, i.e. it refers to the *objects* of the thought of the person serving as *subject* to the main clause: *nä köŋülintä sakïnmïšï alku köŋlinčä bolur* (TT VI 108-9) 'What he thought in his heart will all materialize according to his wishes'. In *näčä yaš yašamïšïn öyür* 'He remembers how many years he lived' (MaitrH XV 2r4) *näčä yaš* serves as object of *yaša-* and the subordinate clause as a whole serves as object in the main clause. More commonly, Old Turkic relative pronouns demand the *-sAr* form (section 4.65). Subject and object clauses are the most common types of complement clauses, dealt with in sections 4.621 and 4.622 respectively. Here we will mention a few rarer types, representing an

[629] The editor writes *kïlmïšïg* but the facs. seems to be clear enough.

indirect object, an instigator (both in the dative case) and a predicate nominal (in the nominative).

Headless relative clauses serving as indirect objects are put into the dative case (of the verb *ïnan-* in the following sentence): *ïnanur biz kapïgïnta kün täŋri ornanmïška* (Ht VII 1238) 'We believe in him at whose gate the sun has installed itself'. In *täŋriči män nomčï män tegmäkä artïzïp* ... (Xw) 'letting oneself get deceived by somebody who says "I represent God, I am a preacher"' *te-gmä* (imperfect *-(X)gmA* participle of *te-* 'to say') serves as subject of the subordinate clause and, at the same time, as instigator for the superordinated verb *artïz-*. The instigator status, in Old Turkic also signalled by the dative case, cannot be equated either with subject or with object (see section 4.5); it should not be considered an adjunct either, as the instigator is a real participator in the event.

The status of the predicative participle should also be clearly distinguished from that of subject: In *savï yarlïgï yorïgan bolur* (Schwitz 17) 'He becomes one whose words and orders prevail' there is zero reference to the subject, and *savï yarlïgï yorïgan* is predicative. Note that the form *yorï-gan* is accompanied by its subjects, *sav+ï* 'his word' and *yarlïg+ï* 'his command', which are linked to the topic by the possessive suffixes.

4.621. Subject clauses

Headless relative clauses can be subjects either of verbal sentences or of nominal ones. In the first, second, fourth and fifth examples to be quoted, e.g., they are subjects of nominal sentences, while they are the subjects of verbal sentences in the third and sixth examples.

The verb form representing the subject of the subordinate clause can be the imperfect or the perfect participle; the subject clause is left-dislocated in the first example, pushed to final position by the *wh°* form in the second one: *bo montag körksüz yatagma nä törlüg kiši bo* 'This (person) lying there in such an ugly way, what sort of a person is he?' (ManErz I 6); *kim ärdi ärki bo bütün yertinčü yer suvdakï alku alplarïg utmïš yegädmiš* (TT X 253) 'Who might have been the one who overcame all the heroes in the whole world?'

Then a few headless relatives whose verb form represents the action itself; first an infinitive: *sizni sävmäkimiz montag ol* 'This is how we love you' (Ht VII 1880). With projection participles: *tün udïsïkïm kälmädi, küntüz olorsukum kälmädi* 'I did not feel like sleeping at night nor like resting during the day' (Tuñ I S5); *ötüg tiläk bulgulukï sarp* 'It is difficult to obtain what one wishes'. With the aorist: *bir ymä ärüri yok ärip* 'nor is there any unity, and ...'. With perfect participle

(transferred to final position by exclamatory interrogative): *nä tusu bolur* (or: *bulur*) *ol ädgü kün, ol ädgü üd körmiši talulamïšï* (TT VI 23) 'Of what use will it be (to him) that he looked for and found out a suitable day and a suitable hour?' In *it ürdöki kuš üni ... äštilmäz* 'No barking of dogs and no voice of birds is heard ...' (M III nr.32 r1) the action nominal is the subject of a passive verb.

The infinite verb forms refer to the direct object of the subordinated verb in *ätözin alku kayu kïlmïšlarïm mandal mudur burxanlarnïŋ iši bolzun; tïlïn alku keŋürü sözlämišlärim ... darni nom padaklarï bolzun; köŋülin alku sakïnmïš ömišlärim sakïnčsïz yaruk yašuk mani bolzun* (TibBud 40-44) 'May all and any thing which I did (*kïl-*) with my body become *maṇḍala*, *mudrā* and the Buddhas' business; may all I speak about (*sözlä-*) in detail become incantations and verses of teaching; may all I think of (*sakïn- ö-*) in my heart become untroubled bright pearls'. A further example: *saŋv(ï)rtak temiši sudur vinay abidaram üč aglïk nomlar tetirlär* (MaitrH Y 265) 'The type they call (*te-*) *saṃvṛti* is considered to consist of the books of *sūtra, vinaya, abhidharma* and *tripiṭaka*'; the possessive suffix on *temiši* does not refer to the subject of *te-*[630] but to the mention of *saŋvïrtak* in the previous sentence.

Headless relatives referring to objects appear more often to have been formed for the purpose of clefting, where they serve as topics: In *ančulayu ärür mäniŋ äšitmišim* (TT VI 05 and U II 28,3$_1$) 'What I have heard is as follows' the topic follows the comment; the non-clefted sentence would have been **ančulayu äšidtim*. We also have the *-dOk* form serving as topic, here with a (rhetorical) interrogative pronoun as comment: *ogrï tep tedökünüz nägü ol* (KP 59,5) 'What is that which you call a thief?' Somewhat similar to the first sentence is *män kololadokum kamagdä ärklig yultuz ärmiš* (Dispute 1 r5-9) 'What I have discovered is that stars turn out to be the mightiest'. *män* is added for reference to the verb's subject as contrast to the other two persons participating in the dispute, here in the nominative as against the genitive of the first sentence in this paragraph. The comment is itself a full sentence, the object of the verb *kolola-* (as the text which *ančulayu* refers to is the object of *äšit-* in that sentence). All three sentences are nominal, but topic and comment are linked by copulas in the first, by *ol* in the second and by nothing in the runiform sentence, where the comment is itself a sentence.

The sentence *ančama ögmiš alkamïš törü ärür, kim äsirkänčsiz köŋlin äd tavar bušï bermäk* (MaitrH I 12r6) is difficult to analyse though its meaning is clear: 'What a laudable behaviour it is to give

[630] That not being referred to, hence left general, is here rendered by 'they'.

away possessions unselfishly as charity!'. We have *kim* subordinating a non-finite verb form below, in the next paragraph; infinite verb forms are also found among the right-branching relative clauses described in section 4.612. Both *kim* clauses appear to be headless relatives serving as topics to the rest of the sentence, as does the headless relative introduced by *nä* in the previous paragraph.

Analytical headless relative clauses can also serve clefting. When the child *bodhisattva* Maitreya says that all the alphabets he has been presented with are not suitable for the holy scriptures, his bewildered father asks (MaitrH XI 15r10): *bo munča törlüg bitiglär užaklar užak sanïŋa kirmäz ärsärlär, kayu užak ärki kim užak sanïŋa kirgüči* 'If all these different sorts of writings and alphabets are not to be considered as alphabets, what, then, are the alphabets which do enter into the category of alphabets?' The structure of *kayu užak ärki kim užak sanïŋa kirgüči* is similar to *ogrï tep tedökünüz nägü ol* just quoted, in that both are nominal sentences with an interrogative pronoun as one member and a headless relative clause as the other.

4.622. Object clauses

While subject clauses appear always to have an infinite verbal form as kernel, object clauses either have verbs or lack them. We will first deal with object clauses without verb, then with ones with verb.

With verbless object clauses either the subject or the predicate is put into the accusative case. The former happens in *Maxarit eläg ädgü ögli teginig busušlug körüp* ... (KP 4,3) 'King M. saw that the well-meaning prince was sorrowful, and ...' or in the second part of the following DLT proverb: *yïlan kändü ägrisin bilmäz, teve boynïn ägri ter* 'The snake does not know how bent it itself is and calls the camel's neck 'bent'.' Alternately, the predicate is in the accusative: *yer suv ärtimligin, ät'öz ürlüksüzin ukïtu* ... 'explaining that the earth is transient and the body fickle'; *yer tarïn ukïtdï* 'He explained that the place was (too) small' (Ht).

The sentences in the following passage are interesting because we know from the context that they are subordinated interrogatives, whence the translation with 'whether' and not 'that': *amranmak köŋüllärintä [...]lArIntA ödrülmišlärin, övkä biligsiz köŋüllüg bolmïšlarïn, övkä biligsiz biligdä öŋi ödrülmišlärin alku ukar* (MaitrH XV 5v11-15) 'He understands it all: whether they got rid of lechery, whether they acquired an angry and ignorant mentality (or) whether they got rid of anger and ignorance'. The suffix *+lXg* in *köŋüllüg* in the second object clause of the following sentence can be translated with the verb 'to have': *nizvanïlag bolmïšlarïn nizvanïda öŋi arïg turug*

bilgä köŋüllüglärin adïra ukar (MaitrH XV 5v17) 'He understands exactly whether they have been marred by passion (or) whether they have wise pure hearts free from passion'. Being or not being angry and ignorant and being or not being passionate are disjunctions (although the way they are expressed does not give immediate insight into this fact), whereby the reader may have known that these are in fact subordinated interrogatives and not statements. However, *amranmak köŋüllärintä ... ödrülmišlärin* is not part of a disjunction; this is a matter we need more evidence for. In all these instances the subjects are referred to by possessive suffixes added to the predicate. Questions can be made objects of verbs of thinking also without incorporation by nominalization; in the following sentence the link is the forward reference of *anï* and the quotative element *tep* following the unchanged question: *anï bilmädi, öŋ[räki] ävirgüčilär užikïn yörügin tükäl kïltïlar mu ärki tep* (Ht VII 870-2) 'He did not know whether previous translators had rendered text and meaning in their completeness'. The sentences with *tep* quoted below show a bit more incorporation, but see the constructions in section 4.7.

In all the verbless object clauses with predicate in the accusative case quoted above, their topics – *yer suv*, *ät'öz* and *yer* – were in the nominative. Topics of subordinated accusative predicates can also, however, be in the genitive form: *yertinčünüŋ ürlüksüzin bilmiš ukmïš k(ä)rgäk* (BT II 915) 'One has to have realised that the world is fickle'; *nomlarnïŋ čïn kertü tözsüzin tüpsüzin adïrtlïg bilirlär* (Suv 386,7) 'They know exactly that *dharmas* are without a real root or base'. A further such instance can be found in TT X 555-559.

There is a wide array of constructions in use when the object clause is verbal. One of these is for the verb of the subordinate clause to be made infinite; in a second type, the subordinate verb is left unchanged but its subject is put into the accusative. The connection can, thirdly, be left implicit.

1) Action nominals and infinitives are put into the accusative to serve as objects of verbs expressing thought, speech or writing; e.g. *tegin alkunï taplamadï, täk taloy ögüzkä kirmišig tapladï* (KP 15,3) 'The prince didn't like any (of the other ideas presented to him), he only liked going out[631] to the sea'. The reason for using the post-terminal *-mIš* form may be that the prince is not interested in the journey itself

[631] *kir-* for this meaning is a calque on a Chinese expression, as shown by Hamilton in his note.

but only in its results. In this sentence, the subject of *kir-* is identical with the subject of the main verb, *tapla-*; in the following three instances, the two subjects differ. The subject of such subordinated verbs is usually in the nominative: In *bildi öŋräki tüzünlär bilmäyökü̈g* (Ht VIII 1919) 'He knew what earlier *āryas* did not know' the subordinate clause is a headless relative. Often the subordinate clause refers not to one of the participants but to the action / event as a whole: *ol üdün kördi Xerodes xan bo mogočlar yanïp adïn öŋi yolča barmïšïn* (U I 9, Magier) 'Then king Herod saw that the Magi had returned and gone by a differrent road'; *buluŋ yïŋak üstün altïn bulganmïš tälgänmišin ukup* 'noting that the (world's) four corners as well as (its) top and bottom are in confusion and disorder' (MaitrH XV 1r11). Note that the *-mIš* form of the last two instances also bears a possessive suffix to refer to the subject. In the following example, however, we find the subject to be in the genitive: *ečisiniŋ kälmišin utgurak bilti* (U III 86,18) 'he was sure that his elder brother had arrived'. When the subject is in the genitive, the possessive suffix with the verb form is, of course, normal. TT X 518-519 has been read as *tü[käl] bilgä t(ä)ŋri burxan-nïg čankramit k[ï]lu yorïmïšïn kördi* 'he saw the perfectly wise divine Buddha carrying out *caṅkramita*'.[632] In the following object clauses the subjects of the subordinated verbs are in the accusative case: *täŋri xatunlarï ymä käntü bägläri täŋrilärig taymïšlarïn körüp* ... (MaitrH XVNachtr 4v29) 'The goddesses, in turn, saw that their husbands the gods had slipped, and ...'; *biz üčägü sizni ... kurug ätözüŋüzni ... ïdalagalï kälïnmïšïŋïzï[n] körüp* (Ht III 451) 'we three saw that you had made preparations for pointlessly giving up your body, ...'. *täŋrilärig* could, in principle, have been interpreted as a genitive, because /ŋ/ is quite often spelled as K, but *sizni* can only be the accusative.

In *nä törlüg aš ašamïšïn ... näčä yaš yašamïšïn öyür* 'He remembers what sorts of food he ate, ... how many years he lived, ...' (MaitrH XV 2r4) the subject of the object clauses is, again, the same as that of the main verb. *nä törlüg aš* and *näčä yaš* are the verbs' objects, *nä* and *näčä* serving as relative pronouns. *nägü kälmïšïŋnï sän adra säčä yora berdiŋ* (QB 797) 'You explained to me what you did clearly and in detail' is very similar, except that *nägü* serves as relative pronoun by itself.

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[632] *caṅkramita* is a walking back and forth in meditation, whence the use of *yorï-*. The editor thinks the stretch written NYX after *burxan* is an error for *ïg*, taking this to be an accusative form; it must, however, be a genitive, the final nasal turning oral.

Subject reference can also be taken care of through possessive suffixes appended to *-dOk*: *bo kargantokïn, alkantokïn, käŋräštökin yöntüštökin bilmäz kiši täg sögüščä oyunča sakanur, käntü ïnča bilmäzlär* 'They consider this cursing and quarreling of theirs to be just scolding and play, like senseless people, and do not know it for what it is' (M I 9,16-18); a letter (UigBrief A5) also has *-dOk+* as object: *äsänin [ä]d[gün] ärdökin ešidip* 'hearing that he is well'. In the sentence *biltimi[z] ukdumuz özümüzün üzütümüzün üzä asra yarokda ... tünärigdä ärtöki[n]* (M III nr.1 IV r9-13) 'We have realised and understood that our selves and souls are above and below, in light and in dark' the subject of the subordinated verb is in the accusative case; above we already met object clauses with *-mIš* which had accusative subjects.

In *kältökümün kertgünzün[lär], siziŋ bägädmäkäŋiz(i)n [...] ärklänmäkiŋiz(i)n bilzün[lär]* (DreiPrinz 65-67) 'let them be convinced of my having come and know of your rule and authority' the infinitive is used in a construction identical with *-dOk+* and in parallelism with it. That the *-dOk+* form is factive seems to follow from the context of this sentence; so do the *-mAk* forms, apparently, since other instances using the infinitive in object clauses also appear to refer to factual circumstances: *sïnmakïm(ï)z buzulmakïm(ï)znï tükätgäli umaďïmïz* ‚We were unable to stop our heartbreaking' (Ht VII 1916) with affixal pronominal reference to the subject and *samtso ačarïnïŋ tavgač xan birlä käliš barïš bitig ïďïšmakïn ukïtmak* ‚the account of the correspondence between Xuanzang and the Chinese emperor' (Ht VII) with both affixal and nominal subject reference.

In the non-factive domain we have *-Ar* for the imperfective, the *-sXk, -gU,* and *-gUlXk* forms for projective predicates. The following is an example with the *-Ar* participle: *bo yeti arïgsïz yetäčilärniŋ ažunïnta tugarïn körüp* 'he saw that he (the divine boy) would be born in these 7 existences of eaters of impurities' (U II 32,57). Orkhon Turkic uses *-sXk* as necessitative action nominal: *yaŋïlïp ölsüküŋün ... bunta urtum* ‚I set down here (how) you will needs err and die (KT S 10); *el tutsukuŋun bunta urtum* 'How you should govern people I have recorded here' (*tut-sukuŋ* here representing projected manner). Where Orkhon Turkic has *-sXk*, most of the rest of Old Turkic has *-gU*: *maytri bodisavtnïŋ yertünčükä inip ... burxan kutïn bulgusïn ... ukar mu siz?* 'Do you ... understand that the *bodhisattva* Maitreya will come down to earth and attain Buddhadom?'; Note that nominal subjects can here appear either in the nominative or in the genitive.

2) With indirect speech, Old Turkic also has a construction corresponding to the Latin 'accusative + infinitive': It puts the subject of a clause which is to serve as the object of a verb expressing thinking or speaking into the accusative case but leaves the subordinate verb finite; the subordination is effected by the quoting verb *te-*: *darmaguptakï atlïg nomčï ačarï baxšïmïznï kïyïltï tep äšidip* (Ht VII 1915) '(we) heard that our teacher, the master preacher named Dharmaguptaka died'; *türk bodunug atï küsi yok bolmazun teyin* (KT E 26) 'saying about the Türk nation that its name and fame should not be destroyed';[633] *ol tïnlïgïg ... yanmaksïz ävrilmäksiz ärür tep bilgülük ol* (U II 39,100) 'It should be known that there is no turning back for that creature'.

When verbless sentences are incorporated as object clauses, we find topic deletion: *az teyin nä basïnalïm* (Tuñ 39) 'Why should we, thinking that (we are) few, be depressed?'. The direct speech sentence corresponding to this content would have been **(biz) az biz* 'We are few'. In section 4.7 we quote a verbless sentence serving as direct speech, also with *biz* as topic, where this topic is not omitted. The writer there has, however, added a reference to the topic in accusative case outside the specimen of direct speech, as we saw above with verbal object sentences.

In the following instances from an early text, the object sentence is marked as such by simply being placed between the subject and the predicate of the main clause; neither its subject nor its predicate are in the accusative but the 1st person which the woman would have used has been replaced by the 3rd person: *kayu išilär kün täŋri karnïnta kirür tüšäsär ... kayu išilär tülintä ay täŋri graxlar birlä karnïnta kirür tüšä{sä}r*[634] *... kayu išilär tülintä yigit urï yaŋa minip k[ar]nïnta kirür tül tüšäsär ...* (MaitrH XI 3r17-25) 'If any woman dreams (that) the sun is entering her belly, ... If any woman in her dream dreams (that) the moon together with the planets is entering her belly ... If any woman dreams a dream (that) a young male elephant is mounting (her) and entering her belly ...'. Next consider two object sentences which have no mark of subordination at all, which are not classical instances of direct speech (q.v. in section 4.7) either: *küčümüz bir ikinti birlä*

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[633] The parallel text in BQ E 20 has the stem form *türk bodun* instead of the accusative. Tekin 1968: 127 (and still Tekin 2003: 107) misunderstands the grammar here, giving this +*Xg* form as a (the only!) instance of a variant -*ïg* of the genitive suffix.

[634] This could also be an instance of haplology and not necessarily an error.

sïnalïm, biz ikigüdä kanyusï küčlügräk biz (Wettkampf 42-44) 'Let us test our strength with one another (to see) which one among us two is the stronger' has no overt marker of subordination but the question "Which one of us two is the stronger one?" must be subordinated to the proposal made to the addressee for subsequent action. In the following passage, finally, the content of the second sentence is the object of *kördüm* in the first: *ya[rlïkanč]učï köŋül turgurup kördüm, irinč [yar]l(ï)g umugsuz ïnagsïz bo tïnlïglar montag ämgäklig [ažun]da tüšmiš tururlar* (U II 4,8) 'Evoking a compassionate state of mind I realised (that) these poor hopeless creatures had fallen into such an (existence) of suffering.'

4.63. Clauses as adjuncts

Adjunct clauses have tasks which are adverbial to a greater or lesser degree: I have classified them as comparative (describing to what the events and actions of the main clause can be compared, what they are like), as temporal, as local, as causal (expressing why or to what purpose events take place), as final (specifying the event aimed at when carrying out the content of the main clause) or as consecutive (detailing the result of the process described in the main clause). They often consist of converbs, sometimes with expansions, in which case no semantic-functional classification may apply: Such cases have been put into the section 'clauses with contextual converbs': The semantic relationship between main clause and converb clause may be retrievable from the context or it may remain fuzzy. Some converbs do have specific meanings and functions, however, and are dealt with in the subsections mentioned above.

Circumstantial nominal expressions can be called nominal adjunct clauses if they have their own topic. Such are *közi yümüglüg olorur ärti* 'He used to sit with closed eyes' (Ht VI 2b9) and the third noun phrase in *özi atanmiš, ögrünčülüg, atï yetiglig kälir* (IrqB LV) 'He comes a famous and joyful man, his horse being led (for him)'; *köz* is the object of *yüm-*, *at* of *yet-*, the possessive suffixes of *közi* and *atï* referring to the subjects of the sentences.

Adjunct clauses can also consist of verbal nominals appearing in the dative, locative, ablative, directive, instrumental or equative cases or getting governed by various postpositions. If adjunct clauses are based on nominal verb forms, the functions of these are sometimes not different from any other nominal used in the case or with the postposition in question: Their tasks can then be inferred from what their case form or the postposition governing them does when

connected with a noun phrase; thus e.g. the *+dIn* form and the *üzä* phrase in the following example: *bo ülüštä Samtso ačarï ... čoonanka barmïšdïn bašlanur, ... ät'öz kodmïš üzä üzülür* 'this section starts with Xuanzang going ... to Č. and ends with his dying'.[635] Such sentence parts are not dealt with below, as they are in fact instances of adjunct phrases rather than adjunct clauses. A number of instances for *-mAk+tA* are, e.g., quoted in Schulz 1978: 52-54 with, respectively, temporal, instrumental or final meanings; none of these meanings are explicit in any of the instances quoted, however, and some of them are outright misinterpretations: The meaning of all of them can be summed up as 'locative of the infinitive'. Then take *bulmayokka övkäläp kakïp tagka ünüp kükrädi ätnädi* (Ht IV 538-9) 'He (the lion) got angry and cross at not having found them, went up the mountain, roared and made noises': The suffix combination *-mA-yOk+kA* forms causal clauses (as discussed below). The clause around *bulmayokka* could here have a causal meaning; it could, however, also be the case that the dative is governed by *övkälä-* ('to be angry *at* something') and that *bulmayok* here serves as perfect participle referring to the action: *bulmayokka* could, in other words, be not a causal clause but the indirect object of a verb in the main clause. Similarly the form *-mAyOkkA* in *šilabadrï ačarï ïdmayokïŋa ayï kodï öpkäsi kälip ...* (HtV 287) has been stated to give a temporal meaning as in 'He (i.e. king Kumāra) got exceedingly furious when master Śīlabhadra did not send him (i.e. Xuandzang) off' but in fact we might as well understand 'getting furious *at* master Ś.'s not sending him off' with the dative governed by the verb phrase itself. The percentage of such unclear instances is quite high; this is not a coincidence but is linked to the origin of compounded adjunct clause suffixes, whose meaning did originally consist of the sum of the meanings of their parts.

Another common uncertainty concerns the meaning actually to be assigned to adjunct clauses: *ol udčï kälmäyökkä ävintäki kišilär istäyü* ... (Ht IV 82-84), e.g., can be translated either as 'When that shepherd didn't arrive, his household looked for him …' or 'As that shepherd didn't arrive, his household looked for him …'; one has to have enough unequivocal examples before one decides whether a certain clause form has one or more than one central meaning. If one determines a central meaning for a construction, then different ones can be understood as contextual variants: *küyü közädü ačïnur agrïnur ärkän ... amrakta adrïlmak ačïg ämgäkkä täginürlär* (Maitr 198v1-6)

[635] Note that the subjects of the *-mIš* forms here used as action nominals are not referred to by possessive suffixes.

'While / Although they guard and take care of them … they undergo the bitter suffering of getting separated from their dear ones' was, e.g., by Schulz 1978: 97 stated to have concessive meaning. This reminds us that 'while' clauses can also get concessive meaning in English. For a special function of aorist + *ärkän* to be worked out, however, it has to be determined whether this instance is not in this context merely used for an ad hoc rhetorical effect. *-Ur ärkän* is here dealt with in section 4.633 on temporal clauses. The normal way for rendering concessive content is the form *-sAr*, especially when followed by the particle *ymä* (section 4.64). Concessive connotations for the sentence quoted should not, however, be excluded.

In the subsections 4.632-4.637, adjunct clauses are classified by function and meaning and not by form; 4.631 is, however, about semantically fuzzy converbs.

4.631. Clauses with contextual converbs

Contextual converbs are formed with the suffixes *-(X)p*, *-(X)pAn* and the very rare *-(X)pAnXn*, the vowel converb with the allomorphs *-A*, *-I*, *-U* and *-yU* and the negative counterparts of all of these: *-mAtI* (only Orkhon Turkic and very rare), *-mAtIn* and perhaps *-mAksXzIn*. The term 'contextual converb' was chosen because the hearer / reader is helped by the context to understand the semantic relationship between the clauses featuring these verb forms and the main clauses to be a causal, a circumstantial or e.g. an adversative one or one of mere coupling. For the temporal use of these converbs see also p.471 below.

Real vowel converbs, i.e. such that are formed from the verbal stem by the speaker *ad hoc* at the time of utterance or writing (unlike lexicalisations and the like, for which see section 3.286), can show close juncture with one of a set of less lexical verbs or auxiliaries and form with them complex predicates (section 3.25) or they can be quite independent from the syntactic point of view.

sürä ünti (KP 64,7) describes the shepherd's driving his herd out of the city gates; in this case converb and main action are simultaneous. In the following sentence (in Ht VIII 69) the converb *tuta* is separated from the main verb by adverbs but still describes the same action as that referred to by the superordinated verb, 'to write': *bo üč ačarïlar … äšidmiš noml[a]rïn tuta öŋin öŋin bitip keŋ yörüg kältülar* 'These three teachers pinned down the teachings which (they) heard (from Xuanzang), writing (them) down one by one, and interpreted them elaborately'. The fixation of Xuanzang's teachings by his disciples is here described in its different aspects; pinning them down, which I

have used for rendering the verb *tut-*, is certainly no lesser ingredient than the physical writing (*biti-*). In the following two instances as in the last mentioned one, converb and superordinate verb are not even adjacent: *kičig teginig tiläyü takï tapïšmaz ärmiš* 'They had been looking for (*tilä-*) the little prince but had not yet found him'; *kollarïn örö kötürü ulug ünin ïglayu maytri burxan tapa adakïnta töpön tüšärlär* 'lifting up (*örö kötür-*) their arms, crying (*ïgla-*) in a loud voice, they fall down head downwards at Buddha Maitreya's feet, facing him' (describing accompanying behaviour).

The inscriptional sentence *karlok yavlak sakïnïp täzä bardï* 'The K. had evil thoughts and fled away' shows the typical difference between *-(X)p* and the vowel converb: Often, the former denotes an action by itself, the latter only one aspect of what is described by the finite verb. Longer sequences are also common; here an Orkhon Turkic series of four verbs, three of them with a conjoined vowel converb: *akin binip oplayu tägip sanča ïdïp topulu ünti* (KČ E7) 'He mounted (*bin-*) his white horse, attacked (*täg-*) head on (*oplayu*), routed (*sanč-*, them) in a whirlwind (*ïd-*), pierced (their rows, *topul-*) and emerged (*ün-*, on the other side)'.[636] In Uygur: *bodisavt tegin bo uluš bodun ayïg kïlïnčlar kïlmïšïn körüp ärtiŋü busušlug kadgulug bolup ïglayu balïkka kirdi* 'The *bodhisattva* prince saw that this nation was committing sins, he became very sad and entered the city *crying*' (KP 3-4).

No doubt because of such instances, Gabain 1974: 123 states that the most important difference between the vowel converb and the *-(X)p* converb is that the former expresses "ein Mittel, eine Gleichzeitigkeit", the latter, on the other hand, "ein zeitliches Vorhergehen". Above we had quoted the clauses *kollarïn örö kötürü ... ïglayu ...*; practically the same appears with *-(X)p* in *näčädä temin öglänip ötrö äliglärin örö kötürüp ulug ünin ulïdïlar* (Suv 619,18-20) 'At some stage a short while after that they regained their senses, then raised their hands and wailed loudly'. Such converbs are semantically unspecific; the sentence just lists the three actions. The reader presumably understands that the raising of hands is a gesture accompanying the crying and wailing, thus expressing simultaneity and manner (against Gabain's statement concerning *-(X)p*). Whether readers expect that all this can accompany the coming back to one's senses or whether they think that lifting one's arms or wailing can take place only after one is in full consciousness can differ from reader to reader depending on their experience in life and is not expressed by the text itself. The clause *karmaputug sïp tsuy kïltïmïz ärsär* (TT IV A67) 'If we have broken the

[636] Quoted in Johanson 1992: 202 (approximate translation).

precept and have sinned', quoted in Gabain 1974: 120 as one of the examples for the view that the event referred to by the *-(X)p* clause precedes the other one, in fact proves exactly the opposite, as breaking precepts does not precede sinning but is simultaneous with it. There is, of course, logical sequencing in the observer's mind, in the sense that a breach of precepts is more directly observable, a label of sinning being attached to the act by the cultural system. Similarly two parallel *-(X)p* clauses can refer to an act of saying and to its content: *agïčïlarka ayïp üküš altun bertürüp* (Ht IV 603) can be translated either as 'he talked to the treasurers and had them give (him) a lot of guilders ...' or 'he told the treasurers to give (him) a lot of guilders ...'; the latter may be preferable if on remembers that *ay-* is 'to say' and not 'to speak'. What is clear is that the verb forms *ayïp* and *bertürüp* differ in denotation but not in reference, referring to the same event. Some similar instances with *ay-* are mentioned in OTWF 803 under *ertür-* and UW 287b under *ay-*, §1d. There is, however, a statement which probably *can* be made concerning anteriority and posteriority in this connection: In a chain of *-(X)p* forms, a subsequent instance, one to the right of another *-(X)p* form in Latin script, is unlikely to temporally precede the content of the first-uttered or first-written *-(X)p* form. Rather than being a grammatical rule, this is a consequence of the iconic principle: Where grammar does not determine the order of elements, the speaker is likely to let his enumeration follow in a manner mimicking reality: Instances such as *o[guz] bodun tokuz tatar birlä terilip kälti* (BQ E34) 'The Oguz people got together (*teril-*) with the Tokuz Tatar and came (against us)', *ol savïg äšidip tün udïsïkïm kälmädi, küntüz olorsukum kälmädi* (Tuñ 12) 'Upon hearing (*äšid-*) that information I no longer felt like sleeping at night or sitting down during the day' or *ol tašïg kötürüp ol kudug ičintä kämištilär* (U I 8,9-10, Christian) 'They lifted (*kötür-*) that stone and threw it into the well' show the anteriority of the event recounted in the *-(X)p* clause; further such examples are quoted in Schulz 1978: 139. Instances such as *ïnčïp ärdämin baturup bo yertinčü yer suvda kamag tïnlïglar ara yorïyur ärtilär* (TT VI 352-3) 'They used to live on this earth among all creatures, hiding their virtues' are, on the other hand, to be interpreted in such a way that main and *-(X)p* verb refer to simultaneous events; further examples are quoted in Schulz §162 (pp.139-140). *sinidin ketip näčük ugay män* (U III 48,11) can best be translated as 'How will I manage *if* I leave you?', but '*when* I leave you' is also a possibility. 'Leaving' clearly has to precede here, as the question of 'managing' arises only as a result of that.

Vowel converbs which are syntactically independent do not differ from other converbs in getting their own objects, in not being adjacent to the superordinated verb and in referring to events which are often not simultaneous with the main event: In a runiform inscription (ŠU E4), e.g., the first verb (*käč-*) in the sentence *bän säläŋä käčä udu yorïdïm* 'I crossed over the Selenga and marched after (them)'[637] has its own object and probably refers to an event preceding the main event. The content of the vowel converb and that of the superordinated verb can well refer to differing activities, events or processes, as in *ača suvsamak* 'to be hungry and thirsty' (U II,1 37) with the verbs *ač-* 'to be hungry' and *suvsa-* 'to be thirsty'; morphosyntactic subordination is here coupled with semantic and pragmatic coordination.

Some independent vowel converbs describe the means or the way by which the main action is accomplished: *bir kemi sïyokïn tuta üntüm* 'I got out holding on to a piece of the ship(wreck)' (KP 54,6). The getting hold of the piece of wood or even the holding on to it (both of which are denoted by *tut-*) certainly preceded the getting out (*ün-*) of the sea or out of danger, led to the latter and made it possible. Note that 'means' is not among the contents dealt with in sections 4.632-7. In the following sentences the vowel converbs also refer to the means necessary for the main action to take place (for which Turkish often uses *-(y)ArAk*): *bo ... tïnlïglar birök burxan körkin körü kurtulgu ärsär* (U II 17,26) 'If, however, these creatures are to be saved by seeing an appearance of Buddha, ...'; *tïnlïglarïg ütläyü ärigläyü alp kutgarguluk üčün anïn täŋri täŋrisi burxan ... tïnlïgnïŋ köŋülin yavalturup [...] özkä ičgärürlär* (DKPAMPb 113-4) 'Since it is difficult to save the creatures *by* giving them advice and admonishment (*ütlä- äriglä-*), that is why Buddha, the god of gods, softens creatures' hearts ... and welcomes them'.[638]

It even happens (rarely) that the subject of a vowel converb and of the main verb are different, if the former is not of an agentive nature; in the following sentence it is the tip of the sun: *yarïn taŋda kün burnï tuga bo ... tïnlïg ... čarïn ïdalagay* (MaitrH XIII 1r12) 'Tomorrow at sunrise, when the tip of the sun appears, this ... creature will give up its ... bun'; cf. the similar use of *taŋ ata käli* 'at sunrise' in MaitrH XV

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[637] Quoted by Schulz 1978: 157. The sentence there quoted after this one is misunderstood by him and contains no vowel converb.

[638] In one case the suffix *-mAkIŋA* is also used with instrumental meaning (mentioned in section 4.633 because other *-mAkIŋA* clauses have temporal meaning). This may be the meaning of some *-mAk üzä* phrases as well. We have not devoted a subsection of section 4.63 to this content, as most clauses with such meaning are constructed around contextual converbs.

10r11.[639] Note that both subjects are in the nominative case. In the other extreme we have cases such as *ävrilä ävrilmägü täg otgurak sav* (MaitrH XIII 8r9), which appears to signify 'resolute words which are both interpretable and uninterpretable'; here the *-A* suffix would merely signify that the suffix *-gU* is meant to apply for the positive base as well.[640]

Two questions have been intensively discussed concerning the *-(X)p* converb, especially in Schulz 1978: 128-147 and in several publications by Johanson, e.g. Johanson 1995: One is its aspectual and taxis value, the other is the question whether it represents coordination or subordination. We have already stated that *-(X)p* is unmarked as to its taxis and aspect values.[641] The second question depends on how one defines coordination and subordination. Concerning content, *-(X)p* clauses may be subordinated, meaning that they describe the activity referred to in the superordinated verb or verb phrase or verb phrase + dependencies, or they may be coordinated, especially when the *-(X)p* phrase itself refers to an independent event appearing in a chain of equivalent events. In Sanskrit or Mongolian one gets tales consisting of a long chain of converb clauses, often with alternating subjects, with one single finite verb at the end of the tale. Such unlimited coordination of *-(X)p* clauses is not quite possible in Old Turkic, as their subjects normally have to be identical with those of the verb to which they are subordinated; with this limitation (adhered to nearly fully), *-(X)p* expressions are very well capable of reflecting chains of coordinated events. Formally, however, such converbs clearly *are* subordinated, as they share most of their grammatical categories with some other, superordinated verb and inherit them from it; the only categories expressed by *-(X)p* forms themselves are diathesis and negation.

In *sözlägälir ärkän bo yükünčüg sözläp bo darnïg sözläzünlär* (Suv 129,21-22) 'When they are about to recite it (i.e. the spell), let them

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[639] Turkish *geç-e* and *kal-a* in *beşi on geçe* 'ten past five' and *beşe on kala* 'ten to five' are also petrified converbs having their own subject (*saat* 'watch, clock; hour').

[640] The normal converb vowel of *-(X)l-* verbs is /U/ and not /A/. This might therefore actually be a scribe's error (intending to write the next word and stopping after he wrongly wrote an *alef*). The phenomenon for which this is taken to be an example is rare at best.

[641] The construction consisting of *nä* with *-(X)p* converb, sometimes followed by the particle *Ok,* refers to events immediately preceding the main action; it is discussed in section 4.633 above, among the temporal clauses. This is a distinct construction which has no bearing on our view of the functions of *-(X)p*.

(first) recite this blessing and (then) this spell' it is clear from the meaning of *-gAlIr* as 'about to be doing something' on the one hand, from the iconic order of the *-(X)p* form preceding the main verb on the other hand, that the recitation of the blessing, expressed by the *-(X)p* verb, is to precede the recitation of the spell. The semantic relationship between the *-(X)p* clause and the main clause can also be made explicit by particles. In a sentence from Ht V discussed in Zieme 1992a: 352 and on p.5 of Röhrborn's edition of Ht VIII, e.g., the relationship is adversative, as *inčip yana* expresses this meaning: *öz užïklarï ymä änätkäkčäsig ök ärip ïnč[ïp] yana ančakya tägšilür* 'Their own alphabet is just like the Indian (one but it) still differs (from that) a little bit.' The meaning 'but' should not be assigned to the converb, which does not exclude it but does not support it either.

When the main verb is negated, the scope of the negation does not (like e.g. Khakas but unlike e.g. Turkish) usually include *-(X)p* converbs linked to it. There is such a sentence in KT E27; here is another one: *kamag kamlar terläp näŋ tirgürmägäy* (M I 15,8-9) 'All the magicians will come together (but) will be quite unable to bring him back to life'. Further examples are quoted in Schulz 1978: 128-129. In the following sentence the scope of the negation does include an *-(X)pAn* converb (which had been thought to be more independent than the *-(X)p* converb); the reason may be that *te-p* and *te-pän* are quotation particles rather than converbs: *kertü ärklig küčlüg täŋri tepän kertkünmädimiz ärsär* (Xw 56) 'If we did not believe in the true, mighty and strong god, ...'.

Subjects of *-(X)p* converbs are normally identical to those of the superordinated verb. In the following example, the subject (hair roots) is different, but is still inalienably linked to the main subject and bears a possessive suffix referring back to that subject: *ol täŋri urïsï ol ünug äšidip korkup ürküp bäliŋläp tü tüpläri yokaru turup ...* (U II 29, 17-18) 'that divine son heard that voice, got frightened and panicked, his hair roots stood up upright and ...' Similarly with *köŋül* 'heart', *agazïmtakï tataglar* 'the tastes in my mouth' and *köz* 'eye' in the following examples: *bo körünč körüp köŋülüŋ yazïlt[ï] mu?* (Ms. Mz 708 r 29-30 quoted in *UAJb* 16:295) 'Did your heart stray seeing this pageant?'; *agazïmtakï tataglar barča yitlinip artokrak ačïg bolup kün täŋri yarokï közümtä arïtï közünmäz* (UIII 37,30-33) 'The tastes in my mouth have all disappeared and have become exceedingly bitter and no sunlight appears to my eyes any more': *tü tüpläri*, *köŋül* and *köz* are all inalienably linked to the main subject; 'the sun' is not but 'seeing' is. In the following example the converb and the main verb have objects in common, one being an inalienable part of the other (though not

marked with possessive suffix): *munï iki köz täglärip sančayïn* (KP 57,5) 'Let me blind this person (*munï*), stabbing out both his eyes (*köz*)'; both predicates, stabbing and blinding, apply to both the person and his eyes. Note that the converb clause is introduced *inside* the main clause. *ig,* the subject in the following sentence, also has no possessive suffix: *ämtï karïdï iglädi ig tägip montag körksüz bolup yatur* 'Now he has grown old and fallen ill, illness has befallen (him), having become ugly he lies there as you see him' (ChristManManus, Manichæan ms. r 12); 'illness', of course, is inalienable as it does not exist without its victims.

Another group of *-(X)p* verbs which have their own subject are those referring to weather and other environmental features, as in *buluŋ yïŋak kararïp körgäli bilgäli bolmadï* (Suv 630,20-21) 'The corners (of the world) got dark and it became impossible to see or recognise anything'.

oza [kä]lmiš süsin köl tegin agïtïp toŋra bir uguš alpagut ärig toŋa tegin yogïnta ägirip ölürtümüz (KT N7) 'Köl Tegin roused his army, which had come in flight, we encircled a group of Toŋra knights at the funeral ceremony of prince Toŋa and killed (them)' is interesting: There is referential – though not grammatical – identity between Köl Tegin with his army (*süsi*) and 'us', the party which the author of the inscription identifies as his own, throughout the text.[642] *agï barïm* in KP 7,5 is not inalienable: *küniŋä ayïŋa munčulayu berip aglïktakï agï barïm azkïna kaltï* 'He gave (alms away) in this way day by day and month by month and (of) the riches in the storehouse there remained just a little amount'. Riches are, of course, low on the agentivity scale. The connection between 'giving out' (*ber-* with 'riches' as implicit object) and the paucity of the remaining riches (*agï barïm*) is that the implicit object of the subordinated verb is the subject of the main one. The following sentence, finally, is the only real exception I have come across; the *-(X)p* verb *yarlïka-* has a wholly different subject from the main verb and the two subjects are fully agentive: *täŋri burxan bo nom*

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[642] The conjecture for the lacuna and the reading in general are supported by a similar passage in BQ E 31; see footn. 59 above for the reading *alpagut*. Johanson 1992: 205 misquotes and misinterprets the sentence (*tegin* is fully visible; *agït-* is spelled with t^1 and not d^1 and does not signify "schlug in die Flucht"). The subject of *ägir-* must clearly be plural (and not Köl Tegin by himself) as a single person cannot encircle anybody. A sentence from ChrManMsFr ManFr v 9, which Johanson there quotes from Schulz 1978 as a further example, does not, in fact, show subject difference between *-(X)p* clauses and their superordinated clause: The two converb clauses are there dependant on a temporal clause ending in *-sAr*; it is normal for that to have a subject differing from the main subject.

yarlïg yarlïkap kamag kalïn kuvrag ... ärtiŋü ögrünčülüg sävinčlig bolu täginip köŋülläri köküzläri bilgä biligläri yarodï yašudï (TT VI 456-458) 'The god Buddha preached this teaching, (then) the whole numerous community … became exceedingly joyful and their hearts, breasts and wisdom shone brightly'. The scribes of two among the nine mss. extant for this passage wrote *yarlïkadokta* 'when he preached' instead of *yarlïkap*, apparently finding the latter verb unacceptable in this passage.

Among the few examples of *-mAtI* clauses appearing in the runiform inscriptions, the following do not refer to distinct actions of their own but rather to negative reformulations of what is stated in the main clause: *säkiz oguz tokuz tatar kalmatï*[643] *kälti* (ŠU E3) 'the eight Oguz (tribes) and the nine Tatar (tribes) did not stay away (*kalmatï*) but came'; *tün udïmatï küntüz olormatï ... esig küčüg bertim ök* (Tuñ 52) 'Not sleeping by night and not resting by day I really gave my services (to the ruler)'. The most likely translation of *bunča esig küčüg bertökgärü sakïnmatï türk bodun ölüräyin urugsïratayïn ter ärmiš* (KT E10) is similar: 'They (i.e. the Chinese) used to say "Let us kill and exterminate the Turk nation", not taking into consideration (*sakïnmatï*) that (we i.e. the Turks) gave (them i.e. the Chinese) so much service'.[644] The meaning of Orkhon Turkic *-mAtIn* appears to have been more of the preparative type (like Turkish *-(y)ArAk*): *igidmiš xaganïŋïn savïn almatïn yer sayu bardïg* (KT S9) 'Not taking (*almatïn*) the advice of your ruler, who nourished you, you went everywhere'. The Turks' migrations appear to have been perceived as the *result* of their intransigence towards their king.

In Uygur, negative converb clauses with contextually determined functions are construed around *-mAtIn*: *tuymatïn tuzakka ilinmiš* (IrqB

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[643] If this were the past tense form it would have been spelled with d^1, presumably implying [δ]; *kälti* is spelled with t^1 because the alveolar is there preceded by /l/; see section 2.409.

[644] The subject of both *sakïnmatï* and *ter ärmiš* is the Chinese. Gabain 1974: 124-5, 180 translates the sentence as "weil sie so viel Arbeit und Kraft nicht widmen wollten, sagte er: 'Ich will …'" and adds: Hier liegt keine zeitliche, sondern eine logische, ursächliche Aufeinanderfolge vor und dazu ein Subjektwechsel." Schulz 1978: 179 corrects this: "Gemeint ist: 'weil sie (die Türken) aber nicht daran dachten, ihre Arbeitskraft (den Chinesen) zur Verfügung zu stellen, sagte er …'". This is an unlikely way to understand the sentence, as Orkhon Turkic had the *-dOk+In üčün* construction for forming causal clauses (see section 4.635) and there is no indication that *-mAtI* could be used in this way. Nor do the instances for *-mAtIn* support Gabain's interpretation, as the subjects of this form are also either identical with that of the main verb or linked to it in some metonymous way.

LXI) 'he was inadvertently caught in a snare' or 'as he did not notice (*tuy-*) anything, he …'. In the following instance the converb form is quite independent both by content and syntax: *kïz yalgan tep kertgünmätin teginkä ïnča tep tedi* (KPFragmA 12-13) 'The girl didn't believe (*kertgün-*, him), thinking (it was) a lie, and spoke to the prince as follows:'; *ol ämgäkig särü umadïn ögsüz bolurlar* (Höllen 121-122) 'Being unable to bear that suffering they lose consciousness.' Schulz 1978: 174 lists these two (and a lot more) as instances of *-mAtIn* with causal 'function'. The sentences can, indeed, be translated with causal meaning for the converb form, but they can also be translated the way I did; it was the author's choice not to make any such meaning explicit and we cannot do it in his stead. There is, of course, an *implicit* causal meaning here. In *yanmïšta oglanlarïmnï bulmatïn yalaŋuz älvirgü täg bolur män* (BT XIII 2,47) 'If I do not find my children when I come back, all alone I would get insane' the meaning of the *-mAtIn* form is outright conditional, since the sentence refers to a mere possibility.

It does not happen very often that the subjects of *-mAtIn* forms differ from the main subjects and when they do differ the two nominal phrases are generally linked with the possessive suffix. We have, e.g., *agïsï barïmï ... ämgänmätin ükün kirür* (TT VI 101-102) 'His wealth comes in heaps without him ... working for it'. 'wealth' is, of course, an entity which is very low on the agentivity scale;[645] the growth of wealth is a process in which the owner of that wealth is certainly the central personality, whether he is an active agent in this process or whether (as described in the sentence quoted) he is inactive. The possessed is here the subject of the main clause. The same is true in the following examples: *ikiläyü tamuda tüšmätin alku ayïg kïlïnčlïg tïdïglarï barča sïzïp öčüp ...* (BT II 374-377) 'they will not again fall into hell and all their hindrances (consisting of) sins will (instead) all melt away and die down'. In the next example the relational entity (*ät kü bulunč alïnč* 'fame and income') does not bear any possessive suffix: *yertinčüg asïgïg tilämätin ät kü bulunč alïnč özin ök kälip kamagka ayaguluk čiltägülük bolgaylar* (Suv 195,19-22) 'Not striving (*tilä-mätin*) for material matters or for profit, fame and income will come (*käl-*) to them by themselves, and they will be honoured by all'. Here, finally, is an example in which the possessed inalienable entity (*ün* 'voice') is the subject of the negative subordinate clause: *tiläḍilär teginig yïglayu sïgtayu busanu, ünläri idi sönmädin* (Suv 637,5-7) 'Crying, wailing and sad they searched for the prince, their voices not

[645] Above we found that the same binome *agï barïm* happens also to be the object of an *-(X)p* converb where the main verb has a different subject.

dying down even for a moment'. Numerous further Uygur examples for *-mAtIn* are quoted in Schulz 1978: 171-177: In none of those instances does the *-mAtIn* form have its own fully agentive and personalized subject.

The suffix sequence *-mAk+sXz+Xn*, with the instrumental of the privative suffix, forms another contextual converb. The subject of this form is normally identical with that of the main clause, and it never makes use of a possessive suffix to refer to it: *ilinmäksizin dyan olorguluk ol* (ETŞ 8,15) 'One must sit in meditation without attaching oneself to anything', *tünlä küntüz armaksïzïn sönmäksizin bïšrunup ...* (Suv 211,5-6) 'exercising day and night, without getting tired and without flagging', *tünmaksïzïn sönmäksizin katïglanu ...* (BT II 389-390) 'striving without resting and without flagging' are some examples. Additional examples appear in Suv 235,10 (*yermäksizin yalkmaksïzïn*), 367,19 and 61 and BT ID160. The *-mAksXz* formation is dealt with in OTWF 396-400; it is verblike in freely governing noun phrases. In one instance quoted there, two *-mAksXz* forms have one instrumental suffix in common, as *azlanmaksïz äsirkänmäksizin* (ShōAgon 3, p.207,10) 'greedlessly and ungrudgingly'. This instance shows that *-mAksXzXn* cannot be a replacement of *-mAtIn*, as the three elements going into the sequence do not appear to have fused. *-mAksXzXn* was in use in relatively late texts only.

4.632. Comparative clauses

The clauses described here introduce states of affair which the writer presents as being similar to the situation referred to in the main clause. We first deal with morphological constructions used for this purpose, then turn to cases where this content is expressed by a non-finite verb form governed by a postposition, then to clauses where such content is introduced by a conjunction and finally mention an instance with what seems to be a relative pronoun.

The equative suffix is very often added to the aorist in Manichæan texts; *ančulayu amrar ärti sizni tüzügü, anasïn b[alasï]*[646] *oglanï sävärčä* (Pothi 98-99) 'they all loved you as children love their mother' has the same content of manner comparison as shown by nouns with*+čA*. This construction with the aorist is found already in Orkhon Turkic, e.g. *üzä t[...] kövürgäsi ätärčä* (BQ W 3-4) 'as when the

[646] The editors Bang & Gabain and Clark propose *b[abasïn]* but *baba* 'father' is not attested in Old Turkic; I take the nominative *bala* to be parallel to *oglan*. The author may have thought less of the psychological status of fathers than the editors did.

drum[647] of ... resounds above'. In a relatively late Buddhist text we find *talïm kara kuš garudï taloy otrasïnta čaparča* (BT III 1000) 'as the rapacious eagle Garuda beats his wings in the middle of the ocean'; a further example is attested in BT III 993-4.

Comparative clauses are often introduced by *kaltï*, e.g. *kaltï ... yarok ay täŋri yašuyu bälgürä yarlïkarča* (M III nr. 15 v13-14) 'as e.g. the bright moon graciously appears shining'; *kaltï elig oglï teginig av(ï)rtalar äligintä igidürčä* (M III nr. 7II r4-6) 'as e.g. a king nurtures his son the prince through nannies' or, in a slightly different construction, *ïnča kaltï är kim yel küčiŋä tolkukug ürärčä* (Windgott 22-24) 'as e.g. a man who blows a bellows by the power of the wind'. In Buddhist texts, *kaltï burxanlarïg tapïnur udunurča* (TT VI 145) 'as when they e.g. worship the Buddhas' or *kaltï lenxwa sayu tütün tütärčä* (KP 38,5) 'as if, e.g., smoke rose from each lotus'. Numerous Manichæan examples with and without *kaltï* are listed in Zieme 1969: 120-121. Zieme also mentions a few Buddhist instances in a note; cf. further Schulz 1978: 86.

Whereas *-ArčA* compares manner, Uygur instances of *-mIščA* compare degree and quantity: *maŋ maŋ sayu adaklarïn irklämiščä bo közünür ažundakï kutï kïvï asïlur* (Suv 419,11-13) 'The more he treads step by step with his feet, the more his happiness in this visible world grows'. Further examples are quoted in Schulz 1978: 87-89. *küči yetmiščä* 'as best he can' and similar expressions for other persons are attested in Suv 387,23-388,2, TT VA 67-68, BT VIIA 435-447 and U III $71,5_2$-6_2. *-mIščA* (and *-gUčA*) forms are also found in adnominal use and express number, degree or quantity; see section 4.124.

In the proverb *tünlä bulït örtänsä ävlük urï käldürmiščä bolur, taŋda bulït örtänsä ävkä yagï kirmiščä bolur* 'When the clouds redden at night it is as though one's wife gave birth to a male son; when they burn in the dawn it is as though an enemy entered the house' (DLT fol.131) the form appears to be related neither to degree or quantity nor to postterminality; the meaning is possibly related to the reportive use of *-mIš*, as this is a proverb about omens.

In the examples quoted, *+čA* was joined to a participle with explicit subject. We also find a construction with verbal nominals referring to putative situations: *biz su körmišdäkičä äs(ä)n tükäl turur biz* (UigBrief C6) 'We are well as when one has seen happiness'; *atalarï ölmištäkičä*

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[647] This translation is tentative: 'drum' is *kövrüg* in Old Turkic (< **kävrüg*, attested in this shape in 14th century Ottoman) but *ke'ürge* / *kö'ürge* in Mongolian. If the proposed rendering which, of course, accords with the meaning of the verb, is chosen, then we would here have a variant very close to what we find in Mongolian.

sïgtašgay (BT III 1029-1030) 'They will cry as if their fathers had died', literally, 'as one in a situation after his father's death'. The construction itself does not need verb forms: *tirig+dä+ki+čä* 'as when one is alive' would not be called a clause.

When *+čA* is joined to a *-dOk* form of a verb of speech with suffix reference to its subject, it expresses accordance; both *aydokïnča kertü bolur ärti* 'it used to come true in accordance with what he said' (M III nr.13, I v3) and *y(a)rlïkadok[u]mča* 'according to my command' (unpublished ms. U 311 bv4, WilkKatMan nr. 103) appear in Manichæan sources.

kaltï alp är čärigkä tägir täg isig özümin äsirkänčsizin titip ïdalap (Suv 395,4-10) 'giving up my life ungrudgingly, as, e.g., a valiant man goes to the army' is construed with the postposition *täg* instead of with *+čA*. In the following Orkhon Turkic sentence *täg* governs two negated aorist forms: *körür közüm körmäz täg, bilir biligim bilmäz täg boltï* (KT N10) 'My (normally) seeing eyes seemed to have lost their sight and my (otherwise) thinking mind seemed to have lost its senses'. With *-mIš* we have e.g. *kamgak käntirkä tayaklïgïn köntülmiš täg* (Ht VII 1975) 'as when the *kamgak* plant gets upright by leaning upon hemp'; *burxanïg körmiš täg sävär taplayur ayayur agïrlayurlar* (TT V A 113) 'they love, appreciate and honour (him) as if they had seen Buddha'; *amtï män yüräkimin tartmïš täg ogulumïn äsirkänčsiz köŋülin titip ïdalap bušï berür män* (DKPAMPb 820) 'I now give up my son as if I had been tearing (out) my heart (but) with ungrudging mind, and give him away as alms'. *-mIš täg* appears also in Ht III 421-3. There is an important difference between *-mIščA* and *-mIš täg*: *-mIščA* compares degree and quantity whereas *-mIš täg* compares the events themselves.

-mAyOk täg is the negative counterpart of *-mIš täg*, in *saŋa utruntačï kišilär ančulayu bolur kaltï ... iši küdügi bütmäyök täg* 'persons opposed to you will fare like somebody who ... and his business did not succeeded' (TT I 51) and *anča täŋlig ärdilär kaltï labay ütintä tört taloy ügüz kïdïgïn bütürü körü umayok täg* (Ht VII 531) 'They were like persons who had not quite been able to see the shores of the four seas in the hole of a shell'.[648] A bit more is said below about the correlative structures used in these sentences.

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[648] The editor, Röhrborn, points out that the Chinese source refers to the unability to scoop up the waters of all the oceans. 'scooping up' is *küri-*, but cf. *kürp* for *küri-p* in BT III 226. The copyist must have mistaken this verb for *kör-* 'to see' and then taken over *üt* 'hole' from the analogy following this one in the text, which refers to the unability to see the domains of the seven planets through a hole.

We have a projection participle in *kïlmagu täg nä nägü iš* (U III 54,15) ‘some action the like of which one isn‘t supposed to do’.

In *yig aš bïšag aš ornï ikin ara sïkïlïp tämirlig olïgïn olïmïš osoglug tokuz ay on kün ämgäk körürlär* (MaitrH XVNachtr 4r25) we have the *-mIš* participle governed by the postposition *osoglug* ‘as, like, as if, in the manner of’: ‘They get squeezed between the places of raw food and digested food and suffer during nine (moon) months and ten days, as if somebody[649] had wrung them with an iron wrench’. *osoglug* governs the aorist in *isig öz alïmčïlarï birlä turušur osoglug turur* (Suv 18,13) ‘It seems as if he is struggling with his angels of death’ or in *üč mïŋ ulug mïŋ yertinčü yer suv täpräyür osoglug közünti* (TT X 139) ‘3000 great thousand-worlds appeared as if shaking’. The semi-predicative verbs *tur-* and *közün-* here share their predicative status with the *osoglug* phrases.

Analogy can be expressed also by the particle *kaltï* or the conjunction *näčük* linked to clauses with verbs in the conditional form; e.g., with both of these together: *kaltï näčük ... alku ulug bodisatvlar burxan kutïŋa katïglantoklarïnta tsuy irinčü ... kïlïnčlarïn kšanti čamxuy kïlïp nätäg arïtdïlar alkïnturtïlar ärsär, ančulayu mäniŋ ymä tsuy irinčü ... kïlïnčlarïm olarnïŋ täg arïzun alkïnzun* (Suv 139,6-14) ‘Just as all the great *bodhisattvas* got absolution from their sins when they were striving towards buddhadom and as they cleansed and cancelled them, e.g., so may also my sins get cleansed away and disappear as theirs’. That sentence and the following both have *ančulayu* and *ymä* in the main clause: *ïnča kaltï kiši eligi bar ärsär ärdinilig otrugka tägsär köŋül eyin ärdini ävdigäli uyur, ... ančulayu ymä kim birök kertgünči bar ärsär burxanlïg ärdnilig otrugka kirip kutrulmak tüšlüg ärdini algalï uyur* (TT VB 90-95) ‘Just as, e.g., if somebody has hands and reaches the Jewel Island, he can collect jewels to his heart’s desire, for instance, so anybody who has faith can, in turn, get to Buddha’s Jewel Island und obtain the jewel whose fruit is freedom’. Correlative sentences with *nätäg* (otherwise dealt with in section 4.65) can also have comparative content: *nätäg ... ävirgäylär ärsär, ančulayu ok ... ävirä täginür män* (Suv 171,16) ‘As they will deflect (their good deeds for the benefit of others), just in that way do I presume to deflect (my good deeds)’.

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[649] The editors unnecessarily ‘emend’ *olïmïš* to *olïnmïš*, giving a passive translation as “als ob sie mit einer eisernen Schnur (?) umwunden (?) wären”.

4.633. Temporal clauses

Temporal clauses give information about the time framework of the main clause by linking it to some subordinated event; they state whether the 'main' event is simultaneous with, preceding or following the subordinated event, whether it precedes or follows it by an interval perceived to be small or not particularly small etc.; they also give information about its flow in time.

There is a great number of forms and verbal phrases expressing various temporal relationships, which will be dealt with one by one below. Before that, we might mention the semantic relationship between contextual converbs and superordinated verbs, which often has a temporal component: As shown in section 4.631, events expressed by the former often precede those referred to in the latter. Especially with vowel converbs in close juncture, the two actions can be simultaneous: *sürä ünti* in KP 64,7, e.g., describes the shepherd's driving (*sür-*) his herd out of the city gates, going out (*ün-*) himself. Main and subordinate actions are here carried out by the same subject. Meteorological entities can appear as subjects of vowel converbs to form temporal clauses specifying time: *yarïn, taŋta, kün burnï tuga* (MaitrH XIII 1r12), e.g., signifies 'in the morning, at dawn, when the tip of the sun appears'.

By meaning, the most unmarked way to construct a temporal clause is to add *-dOk+dA* to the stem of its verb. This is quite common in the whole of Old Turkic and signifies 'when'; e.g. *kaŋïm xagan učdokda* (KT E 30, BQ E 13-14) 'when my father the khan departed' or *üzä kök täŋri asra yagïz yer kïlïntokda* (KT E1) 'when the sky came into existence above and the brown earth below' with explicit nominal subject. It also (like the dative form in Orkhon Turkic) often has the possessive suffix before the case suffix, referring to the verb's subject: e.g. in *tütsüg yïdïn tuydokumuzda* 'when we feel the smell of the incense' (Suv 424,18). In DreiPrinz 54 the reconstitution *ävril[dök]ümtä* must be correct as only *-dOk* would give a rounded possessive suffix. Both nominal and pronominal reference is found in *äčim xagan eli kamšag boltokïnta ... izgil bodun birlä süŋüšdümüz* (KT N3) 'At a time when the realm of my father the *xagan* had become shaky … we fought against the I. nation'. A Manichæan example is *bo yer suv on kat kök täŋri y(a)rat(d)okta aŋar oxšayur ärti* (M I 14,14-16) 'When he created this world (and) the ten-fold sky it was similar to that'. Here is an example for identity of subjects in the main and the subordinate clause: *yakïn tägdöktä ... täŋri burxan adakïnta bagïrïn*

suna yatïp ïnča tep tedilär (TT X 172-176) 'When they had gotten close they … prostrated themselves before divine Buddha stretching forth their breasts and spoke as follows:'. The form can be joined by the particle *Ok*: *yad ellig toyïn atïn äšidtöktä ök ät'özüm köŋülüm bütürü ögirip sävinip* ... (Ht I 295) 'Just hearing the name of the foreign monk, my body and heart get full of joy and …'. Another instance of *-dOkdA Ok* is quoted below, among the examples for *-mAzkAn*. Many additional, mostly Buddhist examples for *-dOk+dA* constructions can be found in Eraslan 1980: 70-71 and Schulz 1978: 57-68.

The locative is temporal also when it governs the projection participle in *-gU*: *tïnlïglarïg kutgarguda,* e.g., signifies 'when one *goes about* saving living creatures', *ädgüli ayïglï kïlïnčlarnïŋ tüšläri täggüdä* (BT II 925-928) 'when (in the future) the retribution for good and bad deeds arrives', *bo nomug okïguda* (Suv 33,21-22) 'when *intending* to read this *sūtra*'. With this construction the subjects of the main and of the subordinate clause are distinct. The *-gUdA* sequence does not appear ever to get a possessive suffix to refer to its subject; indeed instances with explicit subject are rare. Implicit subjects of main and subordinate clause can be identical, as happens with the instances quoted, or different.

Temporal datives (discussed in section 4.1104) are common in the Orkhon inscriptions: Nominals in the dative case serve as temporal adjuncts. In the following example, however, the adjunct includes topic and comment: *köl tegin yeti otuz yašïŋa karlok bodun ... yagï boltï* (KT N1) 'When K.T. was 27 years old the K. people turned hostile'. This, then, is a nominal clause as temporal adjunct. The sequence *-dOk* + possessive suffix referring to subject + dative is found only in Orkhon Turkic, possibly with the same temporal meaning: *olordokuma ... türk bäglär bodun ögirip sävinip* (BQ E2) 'when I was enthroned, the United lords and people rejoiced' (*-dOk* form representing action); a similar phrase appears also in BQ N9. Another possibility is that the dative was here governed by *ögir- sävin-*, giving the meaning 'they rejoiced at my being enthroned' or 'seeing that I was enthroned, they rejoiced': The BQ passage is damaged and the dative could there also have been governed by a verb or a biverb lost in the lacuna.

Uygur has a different type of temporal clause using the dative: *-mAk* with possessive and dative suffixes in instrumental or temporal use. The infinitive phrase *üč ay ärtmäkiŋä* (U II 22,22-24) 'after 3 months had passed', e.g., specifies *after* what stretch in time the action referred to in the main clause took place. Similar clauses with *ärtmäkiŋä* are

attested in U III 82,6-10, Ht IV 620-622 and Suv 393,19-23; cf. *ür keč bolmakïŋa* 'when a lot of time had gone bye' in Ht IV 93-95. The Orkhon Turkic clause *köl tegin yeti otuz yašïŋa* quoted in the previous paragraph should possibly also be understood in this sense, i.e. '*after* K.T. became 27 years old'. When *-mAkIŋA* forms are not accompanied by time expressions, as is the case with the attested instances, they may convey the 'means' employed towards a goal: *käntü özinin katïglanmakïŋa köŋülin yüräkin važïr täg kïlïp alku bizni barča utup yegädip biznidä öŋrä burxan kutïn bultačï boltï* (U IV A 265-268) 'Through his own exertion he made his heart as (hard as) *vajra*, surpassed all of us and has become destined for buddhahood before us'. Such instrumental content is otherwise expressed by *-(X)p* converbs.

The composite suffix *-mIš+dA* is not attested in Orkhon Turkic but is rather common in Uygur. Clauses formed with it generally refer to events preceding the superordinated event: *antada ötrö ür keč üdlär ärtmištä pratikabut dentarnïŋ ät'özin luolar luo ordosïŋa eltdilär* (Maitr 196r20-23) 'After that, when a long time had passed, the dragons carried the body of the *pratyekabuddha* monk to the dragons' castle'; *ötrö ol braxmadatï elig tiši bars birlä yazïnmišta adïn bir tïnlïg tiši bars karnïnta tugum ažun tutdï* (U III 63,12-15) 'Then, after the king Brahmadatta had sinned with the tigress, an aberrant creature found life in the tigress'es belly'; *tïngalï olormišta äŋ ulugï tegin iki inilärïŋä ïnča tep tedi* (Suv 608,15-17) 'When they sat down to rest, the eldest prince said to his two younger brothers:'. In the examples quoted, the subjects of the main and subordinate clauses were distinct. *min vap-xua ... kitaydïn kälmištä bo ämig iki kata okïyu tägintim* (M I 29,9-14, Manichæan) 'I V., …, endeavoured to recite this healant twice after having gotten back from China' shows subject identity in main and subordinate clause; in another postterminal instance in TT X 537 the subjects of the main and the subordinate clauses are also identical, and in both examples the pronoun 'I' is explicit in the subordinate clause as well. In the sentence *kumradïn ketmišdä bermädi* (NestTü 662.6-7, Christian) 'When (I) left the monastery (he) didn't give (me the wine either)', , the two subjects are different and understood to be so only from the context. In MaitrH Y 202, on the other hand, we have a form with possessive suffix although there is explicit nominal reference to the subject, which is that of the main clause as well: *kayu üdün biligsiz virutak elig bäg kapilavastu balïktakï šakilarïg ölürüp yok yodun kïlmišïnta ... altï kïzlarïg bulun alïp kišlänti ärti* 'Upon[650] killing

[650] The editors' translation of this as "als" instead of 'nachdem' is unjustified.

and annihilating *śākyas* in the city of Kapilavastu, the senseless king Virūḍhaka had taken six ... girls as prisoners and married them'.

In the following sentence, the *-mIšdA* form, itself marked for reference to its subject beside being accompanied by a pronoun, does not refer to an event preceding the main event: *biz änätkäkdin kälmišimizdä sintu ögüz suvïn käčär ärkän bir yük nom suvda kaltï ärti* (Ht VII 2045-6) 'When we were on our way from India, while crossing the waters of the Indus river, a load of holy books had gotten lost in the water'. The 'normal' taxis value of *-mIšdA* cannot, then, be taken for granted; tense appears here to have overruled it.

The locative of the aorist gives the meaning 'while', i.e. an overlapping of the course of two events: *ülgüsüz sansïz yüz mïŋ tümän tünlïglar ugušï üküš tälim ačïg tarka ämgäkig täginürdä öyü sakïnu konši im bodisatvïg birök atasar öŋi üdrülürlär adadïn* (BuddhGed 55-58) 'If, however, the multitude of countless 100,000s of myriads of living beings remember the *bodhisattva* Guanyin and call upon him while they experience (*täginürdä*) lots of bitter suffering, he will get rid of the trouble'. With subject of the temporal clause distinct from that of the main clause and expressed by a possessive suffix: *män ïnčïp ... täŋridäm višaylïg mäŋilärig ... täginürümtä ïnča tep ün äšidilti* (U II 30,28-33) 'While I was in this way ... experiencing divine sense pleasures ..., I heard a voice saying the following:'. *bo äšäk barïrta kälirtä taš t(ä)gil bolsar* (SUK RH13) appears to signify 'If this donkey gets lost while coming and going'. Further such instances are quoted in Schulz 1978: 55-56.

Nominal forms of verbs referring to the action can also get governed by postpositions, which mostly have temporal tasks. *-mIšdA bärü*, e.g., signifies 'since', e.g. in *yer täŋri törömištä bärü* 'since the time when earth and sky came into existence' (KP 5,8), *-mIšdA ken* 'after', e.g. *kuvrag yïgïlmïšta ken* (MaitrH XX 1r10) 'after the community assembles'. The former phrase appears as *-mIš+dIn bärü* e.g. in Ht VII 619. In Orkhon Turkic we have *-dOkdA kesrä* in this meaning: *yagru kondokda kesrä añïg bilig anta öyür ärmiš* (KT S5) 'After they (i.e. the Turks) had settled near them they (the Chinese) were straightway thinking bad thoughts'. Manichæan texts have *-dOkdA bärü* and *-dOkdA ken*: *sans(ï)z tümän yïl boltï sizintä adr(ï)ltokda bärü* (M I 10,5) 'Innumerable myriads of years have passed since we got separated from you!'; *on čaxšap(ï)t tutdokumuzda bärü* 'since we kept the ten commandments' (Xw 148). With *ken* we have *täŋri mani burxan täŋri yeriŋärü bardokïnta ken* 'after the divine prophet Mani

went to the abode of gods' (M I 12,14). The adverb *ašnu* 'earlier, before' also has a rare use as postposition; see section 4.21. In constructions like *tüŋür böšük boltokta ašnu ädgü kün körürlär* 'Before they become relatives by marriage they search for an auspicious day' (TT VI 310) it becomes the head of a temporal clause. A ms. variant of this passage has *boltokta ašnuča* instead of *boltokta ašnu*; another example for *-dOktA ašnuča* is quoted in UW 244a under §B. These may either be cases of *ašnu+ča* used as postposition, as we read in the UW, or the suffix *+čA* may have been added to the whole temporal clause. In *kačan tapïg udug kïlguluk törösin ärtdürtökdä ötrö astup ičintä bäklädilär* (Suv 627,19-20) 'After they had at some stage finished the ceremony of doing obeisance, they fastened it (i.e. the relic) inside the *stūpa*' *ötrö* either governs the *-dOkdA* form or is an adverb, but there may not be any content difference between these two options of analysis. The clause is introduced by *kačan*, which is basically not a conjunction but an indefinite temporal pronoun signifying 'at a certain point'; cf. *ögsüz bolup yertä kamïltï. kačan ögläntökdä* (DKPAMPb 131) 'He lost his senses and fell to the ground. When, at some stage, he came back to his senses, ...'.

sayu is an unusual postposition in that it unites local or temporal content with the meaning 'every'. Its use with a verb form gives temporal meaning in TT I 119-120, as would happen if the form were in the locative case: *täprätök sayu iš küdküŋ tapïŋča; olortok sayu oron yurt ögüŋčä* 'Every time (you) move, your work and your business are according to your wish; every time you settle down, the place and camp are according to your concept'; further examples appear in TT I 137-8.

The construction consisting of the vowel converb followed by the postposition *birlä* refers to an event preceding the event of the main clause by a very short time interval: *öz äriglig oronlarïndïn turu birlä* 'the moment they had gotten up from where they had been sleeping' (Maue 1996: 93); *elig bäg katunï birlä ikägü äšidü birlä bo savïg ögsirädilär* (Suv 639,18) 'the moment the king and his wife heard this matter they fainted'. Further examples appear in Suv 640,22, Ht VII 1212, VIII 40 etc. The immediacy of the subsequent event can be stressed by *ök*, as in *ïnčïp igläyü birlä ök ... ölüp bartï* (Suv 4,17) 'Then, a short while after he got ill he … died away'. Then we have *nä* opening such clauses: *nä ünä birlä ök ... tiril-* (Suv 16,13-16) 'the moment (I) got out, I ... came back to life' or *nä bo irü bälgülär bolu birlä ök, ötrö ... boltï* (Suv 381,8) 'Immediately after these signs appeared, there happened …'. In the last instance, *birlä ök* is followed by *ötrö* 'thereupon' and it can also be followed by *anta* 'then'. Cf.,

finally, *anagam kutïn bulmïš kiši ... öŋlüg täŋri yerintä tugar. nä tuga birlä ök arxant kutïn bulup ...* (MaitrH Y 446) 'The person who has attained the status of *anāgāmin* ... gets born in the Divine Country of Appearances. The moment he gets born he attains arhathood and ...'. I assume that *birlä* does not, in this construction, govern the converb. Rather, the converb itself is probably here in temporal use, as in the previous paragraph, and *birlä* is an adverb here signifying 'at once'.

Clauses with the *-(X)p* converb are used in a construction with similar meaning, where the clause starts with *nä* 'what' : *nä anï ulugï mahabalï tegin körüp ïnča tep tedi* (Suv 609,23-610,2) 'When the oldest prince, Mahābala, saw this, he spoke as follows:'. With *Ok*: *tokuz älig šlok sözlädi. nä sözläyü tükädip ök ünüp yorïp bardï* (BT I A_1 11) 'He recited 49 *gāthās*. The moment he had finished reciting, he got up and walked away'; *nä anï körüp ök ät'özlärin ol süŋük üzä kämišip ... kamïltïlar* (Suv 619,16-18) 'The moment they saw that, they threw themselves on those bones and … collapsed'. *nä* sometimes appears also at the beginning of vowel converb + *birlä* clauses and temporal *-sAr* clauses.

The petrified participles *är-kli* (runiform inscriptions) and *är-kän* (the rest of Old Turkic) can be defined as postpositive conjunctions. *ärkli* is joined to the aorist to form clauses describing some circumstance within which the event in the main clause is couched: *anča olorur ärkli oguzduntan küräg kälti* (Tuñ 8) 'While (we were) living in that manner, there came a deserter from the side of the Oguz'; *kečä ay batar ärkli süŋüšdüm* 'I fought at night, when the moon had set' (ŠU E1); *tug tašïkar ärkli yälmä äri kälti* 'The banner being out, there came a man from the vanguard' (ŠU E5); *karlok bodun (buŋsuz) ärür barur ärkli yagï boltï* (KT N1 & BQ E29) 'the K. people, while living without worries, (unexpectedly) turned hostile'.[651] This last mentioned (double) instance is the only one among the ones we have where the subject of the construction is the same as that of the main verb; our interpretation

[651] The word *buŋsuz* has been put into brackets as it does not appear in the KT but only in the BQ inscription, which is a bit later; the passages refer to the same events. *ärür barur ärkli* is clearly a set expression, which is not transparent offhand: Its interpretation has to be guessed from the context and has been understood in different ways by different scholars. The guess 'living without worries' is based on the assumption that the meaning of the expression is roughly equivalent to that of *buŋsuz*. Tekin 1968: 270, 276 is probably wrong in taking the expression to be attributive in KT but not in BQ and translating the passage as 'became an enemy who began to behave freely and feerlessly' in the former case, as the texts are parallel and the meaning of *buŋsuz* 'without worries' has to be taken into consideration.

may therefore be wrong: Those living without worries (and hence surprised by the Karlok transformation) may be the Türk; what prevents this interpretation is the position of the words *karlok bodun* before the *ärkli* clause. *olor-*, *bat-* and *tašïk-* are initial-transformative verbs, denoting both the beginning of a state of affairs ('sit down', 'set' and go out') and the continuing situation ('sit', 'be invisible – of the moon' and 'be out'). In these constructions denoting concomitant circumstances, it is not the initial but the intraterminal state which is selected; this is also what we have in the *ärür barur ärkli* clause. In KT N1/BQ E29 and Tuñ 8, the two Orkhon Turkic examples, the subordinated activity precedes the event described in the main clause and is interrupted by it; in the other two, however, the ŠU (Uygur Steppe Empire inscription) examples, there is no such interruption.

ärkän, the Uygur counterpart of *ärkli*, is rather rare in Manichæan sources. It can govern nominal clauses, e.g. in Manichæan *yer täŋri yok ärkän* (Xw 133-4) 'when land and sky (did) not exist'. Instances of *ärkän* with nominal clauses appear also in QB 1493, 2055 and 4851. The clause *siz änätkäkdä* 'You are in India' is governed in the following sentence: *siz änätkäkdä ärkän bo ačarï uz[a]tï sizni birlä sözläšip* ...(Ht VII 1815-16) 'While you were in India, this teacher had a long conversation with you'. *ärkän* governs a locative also in *karanta ärkän yig oglïn tüšürtümüz* (MaitrH XX 14r27) 'We aborted their unripe child while (it) was in the belly (*karïn*)'. This sentence can show us how the passage of *ärkän* from being a *-gAn* participle of the copula *är-* to becoming a temporal conjunction could have taken place: Interpreting *är-gän* as a participle we could have translated 'We aborted their unripe child *which* was in the belly'; this would have been just as approporiate for the context.

Normally, however, *ärkän* governs the aorist (as *ärkli* does). In a Manichæan text (Xw 159-160) we have *alkanur ärkän köŋülümüzni sakïnčïmïznï täŋrigärü tutmadïmïz ärsär* 'if, while praising God, we did not keep our heart and thoughts directed towards him'. Here is one Buddhist example: *yana biz änätkäktin kälmišimizdä sindu ögüz suvïn käčär ärkän bir yük nom suvda kaldï ärdi* (Ht VII 2047) 'Moreover while we were crossing the Indus river on our way back home from India, one load of treatises was lost in the water'. In the first sentence mentioned, the subjects of main and subordinate clause are the same, while they differ in the second sentence. In *ïnčïp igläyü birlä ök sav söz kodup tutar kapar ärkän ölüp bardï* (Suv 4,17-19) 'Having just gotten ill he lost the power of speech and, while catching up, he suddenly died away' *ärkän* governs a biverb, i.e. two near-synonymous verbs used

together for expressivity. Numerous additional Buddhist examples are quoted in Schulz 1978: 94-101; here is one introduced by *kaltï*: *kaltï balïk kapagda olorur ärkän xan udčïsï beš yüz ud sürä ünti* (KP 64–65) 'As he (the hero of the story) was, in that way, sitting by the city gate, the king's shepherd came out driving 500 heads of cattle'.

Here is an example for the sequence *-gAlIr ärkän*: *bo törtägü ünüp bargalïr ärkän ... bitig käldi* (Ht IV 1472) 'when these four were about to leave for their journey, there came a letter ...'; another example is quoted above at the end of section 3.285.

-mAz ärkän appears to be quite rare; e.g.: *män näŋ kïlmaz ärkän, mün yazoklar idišin ... adïrtlïg bilmäz üddä ärür ärkän anam xatundïn adrïlïp bir ažunlug busuš kadgu köŋülümkä sapïlïp ...* (HtPar 19v26-20r11) 'While I wasn't doing anything, while I was at a stage when I did not clearly … know the vessel of sins, I was separated from my lady mother, sorrow for a whole life was grafted in my heart and …'.

The rather common construction with *-mAzkAn* is not, by meaning, the negative counterpart of aorist + *ärkän*, as it does not supply the main clause with a temporal framework during which the main action took place (as *-mAz ärkän* does). In most examples it appears together with the particle *takï*, giving the meaning 'not yet': *säŋräm takï bütmäzkän, etä bašladokta ok ... täŋridäm ordolar bälgülüg boltï* (Maitr 52r19-22) 'When the monastery was not yet ready, when they just had begun to construct it, ... there appeared divine palaces'. *-mAzkAn* may have been formed with the particle *kAn* discussed in section 3.341 among the emphatic particles (note that it correlates with *Ok* in the example just quoted). The problem with this is that *-mAz* would only be made adverbial through the addition of *kAn* while the elements referred to in section 3.341 as bases of *kAn* are adverbial in the first place. There are further examples for *takï V-mAzkAn* e.g. in Ht IV 203-204 and 433-437, UigSünd 44-46 (thrice 'as long as ... not'), U II 87,60-62, Suv 4,3-8, 6,21-7,2 and 623,1-8, HtPar 13r13-15. One example without *takï* appears in IrqB XXI. Here is another one, with its subject distinct from the subject of the main clause: *kün täŋri tugmazkan ol ok äv ičindä olorup kara öŋlüg ašlarïg ašanzun* (Suv 362,4-7) 'Let him sit in that same house before sunrise and eat dark-coloured food'.

-gInčA has two different meanings, depending on whether the base verb is of the type which needs to have passed a critical point to be considered to have been realised, or whether it gets realised without a critical point: In the first case it signifies 'until', in the second case 'as long as', stressing the parallelism of temporal extension between main

and subordinate verb. Without a critical point we have, e.g. *küči yetginčä darnï sözlämiš kärgäk* (TT V A 73-74) 'One should recite the spell as long as one is able to'; *katïg kertgünčlüg bolmagïnča oŋargalï bolmaz* (HtPar 16r5) 'As long as one is devoid of strong faith one cannot get well'. Note that both main and subordinated clauses of the instances quoted have variables. Other instances with *-mAgInčA* appear in HtPar 16r2 and Suv 392,15.

With verbs which denote actions having a critical point, *-gInčA* signifies 'until'; e.g. *ančakatägi turmagay män täŋrim kaltï siznidin burxan qutïŋa alkïš bulmagïnča* 'I will not stand up, my lord, as long as I do not receive from you the prophesy of buddhadom' with the subject of the subordinate clause the same as that of the main clause. *inčgä sokup lalap bakïr ešičtä sargargïnča kagurup künčit yagïŋa bulgap ...* (Heilk I 172-174) 'crush it finely, roast it in a copper pot till it gets yellow, roll it in sesame oil …' or *äšäkni berginčä bo yer(i)mni yezün* (SUK RH13,14-15) 'Till (I) give the donkey back, he (i.e. the lender) may live off this land of mine' has an *implicit* subordinated subject differing from the main one, *män kälginčä ävig barkïg uz tutgïl* (U III 81,18) 'Keep house well until I come' an *explicit* subordinated subject (in the nominative) differing from the main subject. The meaning of *yangïnča* (BT XIII 2,43) 'till I come back' is very similar to this last instance.

-gAlI (for which see also section 3.286) can have either a temporal or a final meaning (section 4.636); the final use of *-gAlI* forms shades off into that of a supine (section 4.23). The *-sAr* form is another one having a temporal meaning beside its conditional one, but it is easy to see how those two meanings could have been related historically. Concerning *-gAlI* no connection seems apparent between the different uses. In its temporal meaning, the *-gAlI* form presents circumstances described in a main clause as taking place *since* the ones referred to in a converbial clause, the so-called abtemporal meaning: *Türk xagan olorgalï ... taloy ögüzkä tägmiš yok ärmiš* 'It is said that nobody reached ... the ocean since a Turk *xagan* was enthroned' is Orkhon Turkic (Tuñ 18). In Uygur, temporal *-gAlI* is limited to Buddhist texts; Manichæan sources do not have it. Most instances, as the following two, have *bol-* in the main clause: *adrïlgalï yirilgäli ärü ärü [ür] keč boltï* (Ht VII 2064) 'Bye and bye it has become a long time since (we) parted'; *änüklägäli yeti kün bolmïš* (Suv 610,2-3) 'It turns out that she (the tigress) bore her cubs seven days ago'. More examples are discussed in Schulz 1978: 108-113. Schulz also quotes an instance from QB 5685, the only

example for temporal *-gAlI* he found in that text, where the main clause has *käč-* in one ms. but *bol-*, as in Uygur, in the other two mss.. Temporal *-gAlI* appears to have been replaced at least partially by analytical converb equivalents such as *-mIšdA bärü* and *-dOkdA bärü*; the fact that *-gAlI* forms are also found in final and supine use must have helped this process.

Clauses with *-sAr* with no interrogative pronouns, whose central meaning is conditional, are also sometimes purely temporal; the suffix itself can then be translated as 'when': *ötürükyä koltgučïlar kälsär agïčïlarïg bulmaz ärti. bergü bulmatïn koltgučïlar yïglayu barsar tegin ymä ïglayu kalïr ärti* (KP 10,3-6) 'When, a short while later, the beggars came, they (or rather he, the prince) wouldn't find the treasurers; when he couldn't find anything to give and the beggars (subordinated subject in the nominative) went away crying, the prince would stay behind, also crying'. Another example for inability in the main clause appears in U I 8: *mogočlar ol tašïg alïp öz ätözläri kötürü umatïlar. yïlkïka yütürsär yïlkï kötürü umatï* 'The magi took that stone but weren't themselves able to carry it. When they (implicit subject different from the subject of the main clause) loaded it on a horse the horse couldn't carry it (either).' The temporal meaning can be most clearly made out if the event referred to is situated in the past, as in the quoted examples. Otherwise the distinction between temporality and condition can get blurred,[652] e.g.: *ölürgäli elitsärlär maŋrayur üntäyür* (M III nr. 14 v1) 'When / If they (subordinated subject differing from main subject) lead it (i.e. the sheep) to slaughter it bleats and calls out'; *kaŋ kazgansar oglï üčün temäz mü?* 'When / If a father has earnings, doesn't he consider it to be for his son?' (KP 8,3). The Orkhon Turkic sentence *üd täŋri aysar kiši oglï kop ölgäli törümiš* can signify 'The sons of men are all born to die when god sets the time' but a conditional meaning like 'Since it is god who determines timing, the sons of men are all born to die' cannot be excluded. For the following instance a conditional interpretation seems excluded: *nïpur etigin etiglig adakïn maŋ[l]ap yorïsar oyun küg arasïnta aya yap[ïnïp ...] yarašï yorïyur* (TT X 440) 'When she walks treading with her feet adorned with jewels, she walks harmoniously, with dance and song, clapping her hands'. Unlike the previous examples, the subject of the subordinate clause is here identical with that of the main clause. In all the examples quoted, the subordinate verb

[652] As German *wenn* 'if' is historically the same as *wann* 'when' and English *when*.

phrase consists of a simple *-sAr* form; in none of them is there an analytical phrase consisting of a verb form together with *är-sär*.

Indefinite temporal pronouns are often coupled with a temporal interpretation: *kačan ölüm yagï kälsär tolp ät'özin ïdïtïp sasïtïp ...* (TT X 547) 'When, at some stage (= *kačan*), the enemy death comes, he makes her whole body stink ...'; *kačan ol mogočlar bïdïlxïmka tägdilär ärsär ol yultuz täprämädin šük turdï* 'When, eventually, those Magi (subordinated subject in the nominative) reached Bethlehem, ...' (U I 6, Magi). In DLT fol.54 we find a temporal *-sA* form with *kalï*: *kïška etin*[653] *kälsä kalï kutlug yay* 'Prepare (intransitive *et-in-*) for winter when blessed summer comes'. *näčädä* can also be used with temporal *-sAr* clauses: *näčädä ölsär* 'when, at some time, he dies, ...' (U III 43,19); with similar content and grammatical shape but much more elaborately TT X 539. The best translation for *näčädä birök* with *-sAr* verb appears to be 'anytime when', e.g. *näčädä birök ... balïkka kälsär, ... ašnuča män čïgaynïŋ kïyïnta käli[r] ärdi* (Ht) 'Anytime when he came to town, however, he first used to come to the alley of poor me'; *näčädä birök bo tütrüm tärïŋ yörüglüg nom ärdini yitlinsär batsar, ötrö ančada ... köni nomlar kertü yörüglär ymä barča yitlingäylär batgaylar* (Suv 197,17). These elements are not conjunctions but add some vague temporal content. When, however, *kačan* is used with a finite verb form, it obviously is the subordinating element, as in *kačan ečisinïŋ [käl]mišin utgurak bilti, anta [ok...] käntkä bartï* (U III 86,18) 'When he got certain news that his elder brother had arrived, he immediately went to the town (of Benares)'.

On p.476 we saw temporal clauses starting with *nä* 'what' and containing either the vowel converb followed by the postposition *birlä* or by *birlä ök*, or the *-(X)p* converb, sometimes also followed by *Ok*. Temporal *-sAr* clauses can also open with *nä*: *nä ölsärlär anta ok ün eštilür, 'tiriliŋlär, tiriliŋlär' tep* (MaitrH XXV 3v15 + Maitr Taf 81v31) 'The moment they die, a voice is immediately heard saying 'Get back to life, get back to life!' Like the other two constructions starting with *nä*, this one as well gives the meaning of the main action following immediately upon the subordinated one. The construction cannot get misunderstood for the ones described in section 4.65 (where the subordinate clause also starts with an interrogative-indefinite pronoun and has a *-sAr* form), because there the reference of the interrogative-indefinite pronoun is taken up by a demonstative in the main clause

[653] Unnecessarily changed to *'anun'* by the editors.

(which doesn't happen here).[654] *nä körsär* in Ht III 776 signifies 'When he suddenly looked up, there was ...'.

In the second Christian text (r 15) in ChristManManus, the meaning 'when' is expressed by *näčük* and a finite form: *näčük ešidti ol buzagu [...] öginiŋ ünin, [tär]kin yügürüp kälti [ö]giŋärü* 'When that calf heard its mother's voice, it immediately came running towards its mother'. The next two instances, which appear in a different Christian text, show *näčükin* instead of *näčük* and use it with the conditional: *näčükin bulsar sizlär ... maŋa išitdürüŋlär ... ol mogočlar näčükin urïšlïmtïn ünüp barďïlar ärsär ol yultuz ymä olarnï birlä barïr ärdi* (U I 6,2-6) 'When you find (him) … tell me (about it) … when those Magi left Jerusalem that star was still proceeding together with them'. The temporal use of *näčük(in)* may be limited to the Christian sources, as this element otherwise signifies 'how', 'as' or even 'why'.

We do also find correlative pairs of pronouns with temporal meaning, but these pronouns are in adverbal case forms or appear in phrases with temporal meaning. The sentence *näčä yügürür ärti anča kusar yarsïyur ärti* (M I 7,12-13) 'As he was running, so was he vomiting and feeling disgust' describes the action of running as taking place in parallel to the other two. This also is a temporal relationship, as the vomiting and disgust are not the result of the running; unless the translation should be 'The more he ran the more he vomited and felt disgusted' (which seems unlikely). The link between the two sentences is secured by the correlative pair *näčä ... anča*. The following sentence also shows an interrogative-indefinite pronoun, *kayu üd+ün* 'in whatever time', in the temporal clause and a demonstrative pronoun in the main clause: *kayu üdün män beš törlüg ulug tülüg kördüm ärti, antada bärü ... olorgalï küsäyür ärtim* (MaitrH XI 4v18) 'When I had seen the 5 sorts of great dreams, since then was I wishing to sit ...'.[655] Here, however, the two pronouns are not in correlation; the subordinate clause is construed so as to supply a static time frame, but the main clause takes up the time referred to in that subordinate clause as a point, the starting point of a situation existing since that previous time and the time of the story. The normal way to correlate interrogative and demonstrative pronouns is with *-sAr*; in MaitrH Y 286-302 we have several pairs of such temporal sentences: *näčäkä tägi bo sansar ičintä tugmïš tïnlïglar ... tört*

[654] Beside the fact that *nä* cannot be the object of *ölsärlär* because the verb is intransitive and cannot be its subject because this latter is shown to be plural.

[655] Another temporal clause starting with *kayu üdün* is quoted earlier in this section, in the paragraph dealing with *-mIšdA*.

tugumlug kïsag taŋagta kïsïlur taŋïlur ärsärlar, ančaka tägi utun tetirlär. ... kayu üdün säkiz türlüg tüzün yollug yarok yula köküzlärintä bälgürsär, ... ol üdün temin ök tüzün tetirlär '*As long as* creatures born in this *saṃsāra* ... are squeezed in and fettered by the tongs and fetters of the four (types of) birth, *so long* are they considered to be shameless. ... *When* the beacon of the eightfold rightous way appears in their breast, ... only *at that point in time* are they considered to be righteous'. The correlative pair *ančakatägi ... näčäkätägi*[656] also appears in a temporal clause signifying 'as long as' e.g. in MaitrH XV 3r27-8; in MaitrH Y 316 we find *kayu üdün ... temin ök*.

4.634. Local clauses

While temporal clauses constitute a rich and complex system, there hardly are any local adjunct clauses. The reason may be that temporal relationships are normally linked to events whereas place is more often described with phrases not involving verbs; local relative clauses are very common.

There are rare Uygur instances of local clauses built around a correlation of interrogative-indefinite and demonstrative pronouns governed by the postpositions *sïŋar* or *yïŋak*: *ol täŋri urïsï ... tavranu kayutïn sïŋar täŋrilär eligi xormuzta täŋri ärsär, antïn sïŋar yakïn barïp ... adaklarïnta töpösi üzä yükünüp ...* (U II 29, 19-21) 'that divine boy hurriedly went into the direction in which the king Indra, the king of kings was, bowed to him by putting his head on the ground before his feet and ...'. The subordinated verb is conditional in the previous example but indicative in the following one: *kayutïn yïŋak ayagka tägimlig burxan bolur ärti, antïn yïŋak ...* (TT X 83-85) 'In whatever direction the venerable Buddha$_i$ happened to be, in that direction (he$_j$ told him$_k$ to go and do obeisance to him$_i$)'. Both of these instances describe the target of motion described in the main clause.

4.635. Causal clauses

The speaker/writer had several means at his disposal for constructing clauses supplying causes: the infinitive in the ablative, perfect participles in the instrumental or in the dative or governed by *üčün* or further analytical means. *üčün* signifies 'because' with factive verbal nominals such as *-mIš* and *-dOk* but 'so as to, in order to' with non-factive ones such as *-gAlIr* or *-gU*; these latter are discussed in the

[656] Both spelled as one word, although *tägi* is, of course, a postposition governing the dative form of these pronouns.

section on final clauses, which follows the present one. With nominal clauses it usually signifies 'because' but can also sometimes give final meaning. In these constructions *üčün* subordinates predicative relationships joining comments to (sometimes implicit) topics.

Here, then, are a few examples with factive nominal clauses: *ol elig burxan kutïŋa kataglanur bodïsavt üčün* (HamTouHou 1,14) 'because that king was a *boddhisattva* striving for buddhahood'. In *maxakašy(a)p arxantag ayagka tägimlig üčün täŋri täŋrisi šakimun burxan ornïŋa olgurtï yarlïkadï* (Maitr 170r7) 'The god of gods the Buddha Śākyamuni seated the *arhat* Mahakaśyapa on his (own) seat because he was worthy of honour' the clause subordinated by *üčün* is the nominal clause **maxakašyap arxant ayagka tägimlig ärür*; its topic is deleted because it appears in the main clause. Further examples appear in Ht V 100-106 (twice), BT I A_2 19-21 (all quoted elsewhere in this book). The construction existed already in Orkhon Turkic, as in *kutum ülügüm bar üčün* 'since I had fortune and good luck' (BQ E23) and *bägläri bodunï tüzsüz üčün* 'because the lords and the people were in disaccord' (BQ E6). Laut 1986: 49 n.2 makes likely that *tömgäsin üčün* (Maitr 2r2) signifies 'even though they are foolish'; here the meaning would not be causal, then, but concessive. Note that constructions with *-sAr* can also have concessive meaning beside the more usual conditional one. Although *tömgäsin* is a noun form, what is here governed by *üčün* is not this word by itself but the word as predicated upon 'they', referred to by the possessive suffix. When the topic of a clause subordinated by *üčün* is the 1st or 2nd person, this is also expressed by a possessive suffix, as in *yavlakïŋïn üčün* (KT) 'because you are bad'. In *tïnlïglarïg ütläyü ärigläyü alp kutgarguluk üčün* 'because it is difficult to save living beings through advice and admonishment' (DKPAMPb 115) *üčün,* governs a small clause (see section 3.284) under *-gUlXk*.

In Orkhon Turkic the *-dOk* + possessive suffix in the accusative + *üčün* construction is causal, e.g. *bilmädökin üčün, biziŋä yaŋïltokïn yazïntokïn üčün xaganï ölti* (BQ E16) 'Their ruler died on account of their ignorance and because they erred and sinned towards us'; *täŋri yarlïkadokïn üčün* (KT S9) 'by the grace of God'. In Uygur we find e.g. *o[l sakïnčïg] sakïntoklarï üčün ayag kilïnčlärï üstälür* (MaitrH XX Endblatt r10) 'Their sins increase because they think that [thought]'. In the negative form e.g. *körmädökin üčün* 'because he didn't see' (Manichæan ms. Mz 372 r6, WilkKatMan nr. 122); *] arïg turug üčün tamuka [...] barsar ymä ašayï artama[do]k üčün maytri burxan birlä [tušu]p tamuluk ät'özintin ozar* (Maitr 220 r6) 'Because he is pure he

will, even though he may go to hell, meet the Buddha Maitreya and, as his data are not deteriorated, he will be saved from his hellbound body'. Note that *artamadok* and *yarlïkadokïn* in the KT S9 example are both accompanied by explicit subjects, but that the former has a possessive suffix referring to the subject whereas *artamadok* doesn't; this may be a dialect characteristic or it may simply be due to the fact that *āśāya* is not an individualized entity like *täŋri*.

In Buddhist sources the post-terminal *-mIš üčün* construction is more common than *-dOk üčün*, e.g. *kalmïš buyroklar ymä üküš ažunlarda ... ögüg kaŋïg tapïnmïš udunmïš üčün, burxan körkin etip virxar yerin sipirmiš üčün, nom ešidip nom bitig bitimiš üčün, ton ätük aš ičgü bušï bermiš üčün ... arxantlar bolurlar* (Maitr 50 r1-8) 'And the remaining commanders become *arhats* because, through many existences, they honoured and obeyed mother and father, adorned the effigy of Buddha and swept the ground in chapels, listened to the teaching and wrote down doctrinal texts and gave away clothes and shoes, food and drink as alms.' With possessive suffix referring to the subject, e.g. *öŋädmišin üčün* 'since he had recovered' (Yosıpas 125).

The present participle *-dAčI* in a causal clause: *bo montag asïg tusu kïldačï üčün bo nom ärdini, anïn ol šloklarïg tükäl bititti* (BT I A_2 20) 'It is because this jewel of a text does this much good that he (the emperor) had those *gāthās* written out in full'. The aorist also belongs to the group of participles supplying causes (and not to the group expressing intention) although the state of affairs referred to with that form did not yet actually have to have taken place at the time of the utterance: *arkïš barïr üčün* (UigBrief B) signifies 'because a caravan is going (there)'; i.e. the caravan is in planning or in preparation but has not left as yet. Cf. *körmäzi üčün ... at öŋ mäŋizig adïrtlayu körü umaz* (MaitrH XV 8r26) 'because he is blind he cannot distinguish objects and appearances'.

In Manichæan sources there are a few instances where the instrumental form added to *-dOk* with possessive suffix supplies reasons for the main clause, e.g. *azgurdokïn* 'because he led (our senses) astray' (Xw 19) or *üzüti ozakï özkä ämgäntökin, ... kop yerdä ačïg ämgäk körtökin ymä irinč kiši oglï ... atayurlar* (M I 9,3-8) 'because their soul suffered in their previous life, because they suffered bitter torments everywhere they call them … poor sons of men'. The construction corresponds to *-dOkïn üčün* in Orkhon Turkic and *-mIš üčün* in later Uygur, which were dealt with above.

The suffix combination *-mIš+kA* is used for causal constructions in Buddhist texts: *käk birlä katïglïg savlar köŋülintä ärmiškä näŋ bo*

savlarïg bulgalï umazlar (BT II 990-992) 'As there are matters mingled with hate in their heart, they are quite unable to attain these things'; *män samtso ačarï birlä keč tušmïška burxan nomïn šazïnïn keŋürtü umadïm* (Ht VII 1295) 'As I met master Xuanzang at a late stage (in my life), I was not able to spread Buddha's teaching and practice'. In all such instances[657] the subordinate clause precedes the main clause. The content of the causal clause can be taken up by *anïn* and/or by some equivalent phrase in the main clause: *alku nomlarïg barčanï könisinčä ukmïška, könisinčä tuymïška könisinčä körmiškä anïn bo anvant tültagïn män täŋrilär uruŋutï ... tep atïm täginür* (Suv 540,17-23) 'As I have correctly understood, correctly felt and correctly seen all *dharmas*, therefore, by this reason has my name been determined as "the gods' general"'. Subjects of such forms are, where they are explicit, expressed either by nominals in the nominative, by possessive suffixes in the verb form or within a genitive construction (on account of *-mIš* being a perfect participle), having reference to the subject both in the genitive and in the possessive suffix of the verb form; the latter e.g. *tört maxarač täŋrilärniŋ küyü közädü tutmïšlarïŋa* (MaitrH XI 4v10) 'as the four *mahārāja*-deities hold (him) under their protection'. Subjects of main and subordinate clauses can be either different or the same.

The negative counterpart of *-mIškA* is *-mA-yOk+kA* which, in turn, is not attested without *-mA-*: *män xwentsonuŋ küčüm takï käli täginmäyökkä ... ötüg bitig kïlïp ... ïdu tägintimiz* (HtPek 89 r 5-11) 'As my, Xuanzang's, powers have not yet been restored, … we endeavoured to prepare a petition and send it'. *-mAyOkkA* is attested either with subject in the nominative or with the subject appearing as genitive qualifier of the head (a perfect participle) together with reference to him in a possessive suffix. The subject of the form may be the same as that of the main clause, or the two may differ. There may also be a generalised subject, as in *täŋrikä yagïš ayï[k] bermäyökkä baš[ïn] közin agrïtur* 'When one does not offer sacrifices or vows to (a) god, it hurts one's head and eyes' (TT VII 25r1). In this last example the *-yOk* form could, of course, also be taken to be a headless relative clause referring to the subject, giving 'People who don't offer ... get pains in their head and eyes'.[658]

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[657] See further examples in Schulz 1978: 39-47; a few of the *-mIškA* clauses which he considers to be temporal can be interpreted as causal as well; since causal meaning is undebated for most of the clauses having this suffix, this is the meaning to be understood in all uncertain instances. See section 4.633 for the dative in temporal clauses.

[658] This latter is the translation proposed for the sentence by Röhrborn 2000: 269.

-mAk+tIn supplies reasons for matters recounted in the main clause: *öŋüŋ körküŋ täprämäkiŋ bolmamaktïn ... ögdi yükünč yaratgalï kim tetingäy* (ETŞ 160,74-77) 'In view of the fact that you have neither appearance nor motion, who would dare to write a *stotra* (on you)?'. *bilgä bilig paramïtïg ögmäkimdin, birlä tugmïš buyan üzä bo tïnlïglar bilgä bilig paramïtlïg käčig üzä birtämläti ol kïďïgda tärk tïnzunlar* (ETŞ 160,82-85) 'As a result of my praise for the virtue of wisdom, may the *puṇya* which arises therewith serve to get these creatures over the ford of the virtue of wisdom quickly and once and for all to peace on the other bank (i.e. *nirvāṇa*)'. With possessive suffix referring to the subject and a negative verb form: *bo kamag öŋi öŋi nomlarnïŋ tüzülmäkindin, öŋi bolmamakïnďïn, činžu tegmä ärtöktäg čïnkertü tözi näŋ idi öŋi ärmäz* (Suv 383,22-384,1) 'Because all these different *dharmas* are parallel and not different, their so-being true root called *činžu* is not different at all'. The following verse has a nominal ablative, two ablatives of *-mAk* and one of *-dOk* all expressing 'reasons': *adrok säčmä sukančïg yeg tözlügüŋtin / atlïg külüg tetrüm täriŋ bolmakïŋďïn / alp tuyguluk oŋarguluk ärdökiŋdin / alko körmäk kör{mä}mäktin säčilür siz* (ETŞ 15,62-65) 'You are special because you have a ... root ..., because you are ... deep, because feeling and comprehending you is hard (and) ... because you see everything and nothing.'

The causal meaning can be taken up by the instrumental *anïn* in the main clause, as in the following example, where *üčün* governs a verbless clause with implicit topic: *bo montag üküš ädgülärniŋ kapïgï üčün, anïn ... samtso ačarï tavgač tïlïnčä agtardï* (Ht VIII 46) 'Because (it is) the gate of so many good things, therefore … the master *tripiṭaka* translated (it) into Chinese'. *nä üčün bilmäzlär tep tesär, kim ol ... kertü töz sözlägülüksüz nomlaguluksuz üčün, anïn anï bilmäzlär* (Suv 386-387) 'If one asks why they do not know it, it is because the … true root is unstatable and unteachable', that is why they don't know it'. With causal ablative: *tugsar ymä yalŋukta kišilärniŋ yerintä, yeg ayaglïg bolmaktïn, anïn täŋri tep tetirlär* (Suv 550,17-21) 'Even though they are born among humans and in people's country, they are considered to be gods because they are eminently venerable'.

The causal clause is introduced by *kim* in the first Suv example in the last paragraph as in the following sentence: *kertü yol oruk(k)a ögrünčün täginiŋ, kim sizlär anï üčün okïtmïš boltuŋuzlar* (M III nr.7 III r4) 'Experience the true road with joy, as you have been called for (or 'because of') that'. In this last example the causal cause has no *üčün*, perhaps because there already is one *üčün* within the clause. Thus

the whole subordinating task is borne by the conjunction *kim* in this case. Similarly in *ančama kutlug bo üd kolo ... takï kutlug bo yer oron kim bodïsavtlar bo koloda bo yer oronta ... ulag sapag nomug sakïntïlar* 'This time and this place are (so) blessed because the *bodhisattvas* have thought about the law of causation at this time and place!' (MaitrH XV 6r5; there is another such sentence in 6v6). The author is here linking a state (blessedness) with an event, but the direction of inference is not clear: It may be that the time and place are blessed *because* of the mental-theological achievement of the *bodhisattvas*, or the writer may be giving his *justification* for stating that they are blessed. However, consecutive clauses (section 4.637) are also introduced by *kim*; the second clause may be consecutive and not causal if the writer is stating that the *bodhisattvas* perceived the chain of cause and effect *as a result of* the blessedness of that particular time and place.

The sentence quoted above from M III nr.7 III could also have been translated with relative *kim*, as 'Experience the true road with joy, you who have been invited for that purpose'. The following sentence is translated with a relative subordinate clause in UW 122a: *ymä yegädmäk utmak bolzun maŋa agdok karï petkäči mar išoyazd maxistak üzä, kim ymä ulug amranmakïn agïr küsüšün bitidim* (M I 28,21) " ... der ich [dieses Buch] mit großer Verehrung und mit gewaltigem Eifer geschrieben habe". The clause could, however, be causal as well: 'May I, the worthless old scribe, prevail everlastingly through his holiness the *maxistak* I., since I have written it with great love and serious effort'.

In Orkhon Turkic direct speech subordinated by *te-yin* 'saying' can in fact introduce a causal clause: *arkïš ïdmaz teyin sülädim* (BQ E25) 'I campaigned (against them) because they were not sending (tribute) caravans' (lit. 'saying "he is not sending caravans"'); another such instance, also with an aorist, appears in BQ E39. Not far from this meaning is a sentence in Tuñ 24: *aŋar ayïtïp bir atlïg barmïš teyin ol yolun yorïsar unč tedim* 'I asked him; since (*teyin* 'saying') a rider had gone (there) it will be possible (for us) to go by that way, I said.' Other Orkhon Turkic clauses subordinated by *teyin* (which all have volitional form) are all final.

4.636. Final clauses

In section 4.633 we saw that the form in *-gAlI* has a temporal meaning, sometimes called 'abtemporal' (of stating that what is referred to in the main clause happened *since* the events of the *-gAlI* clause). The other important function of *-gAlI* converbs is in final clauses, which state that

the content of the converbial clause is the aim of the action referred to in the main clause. Such clauses usually have the same subject as the main clause, e.g. in *sïŋar süsi ävig barkïg yulgalï bardï, sïŋar süsi süŋüšgäli kälti* (BQ E 32) 'Half of their army went to plunder the houses, half their army came to fight (against us)'; the phrase *süŋüšgäli käl-* appears also in *sizlärni birlä süŋüšgäli kälyök män* (U IV 82) 'I have come to fight against you' and *yäkkä süŋüšgäli kälti* 'he came to fight the devil(s)' (Xw 3). Cf. further *ašagalï olormïšlar* (M I 35,14-15) 'They sat down to have a meal' and *ölgäli yat-* 'to lie down to die'. In *anandaširi atlïg toyïnka amtïkï nomlarnïŋ tamgasïn oyturgalï aŋa kärgäklig yeväkin anï barča tükäl anutup* (BT XIII 45.2.11) '(he) prepared all implements necessary in order to commision the carving of the printing blocks of the present books by the monk named Anandaśrī' the instigator of the carving is also the person making the preparations (*anut-*). Main and *-gAlI* clause agent identity holds for 20 Manichæan examples collected in Zieme 1969: 163-4 and more than 15 Buddhist ones collected in Schulz 1978: 114-115. The function of *-gAlI* thus corresponds to that of the English infinitive; I would not (thinking, e.g., of Latin *dicere*) for this reason call this form an 'infinitive', however, as in Nevskaya 2002.

Rarely, final clauses with differing subject can appear as complements, e.g. *bizni sini algalï ïddï* 'He sent us to fetch you'; in *kavïšgalï ïd-* in Ht IV 968-969 and *tilägäli ïd-* in Suv 636,10-12 the subject of the *-gAlI* verb also differs from that of *ïd-*. Our interpretation of Tuñ 27 depends on whether there as well *-gAlI* can have a subject different from the main verb: The sentence can be read either as *ašangalï tüšürtümüz* 'We had (them) dismount to have (their) meal' or as *sanagalï tüšürtümüz* 'We had (them) dismount to count (them)'. For the first interpretation there would be two different agents (those who tell others to dismount and the eaters), though in fact the agents wouldn't have been wholly distinct because the commanders would also dismount and eat.

In section 4.23 I dealt with complex verbal phrases incorporating the *-gAlI* form but showing no final or temporal content nor expressing such categories as actionality, ability, politeness etc.; those involving the verb *sakïn-*, also mentioned there, are border cases: With *yarmangalï sakïn-* 'to plan to climb', e.g., the climbing could be considered to be the aim of the planning, as going is the aim of the begging in *bargalï ötün-* 'to beg to go' (Ht VII 1883). If a phrase like this is nominalised we get *kim kayu är kunčuylarka yarangalï sakïnčïn yïrlap taxšurup bitig bititsär, ...* (U III 75,10) 'Whichever man sings

and writes verses and has letters written with the intention of currying favour with women, ...'. *sakïnč* is a verbal noun and pleasing women is described as being the objective of the thought of the putative subject being evoked here.

When *üčün* governs clauses with nominal predicates it usually has causal meaning. However, the example *ögi kaŋï kutluglar üčün ävirt-* (BT II 114 and elsewhere in that text) is in its context to be understood, I think, as 'to have (it) translated (or: to have *puṇya* deflected) so that his parents would be blessed', i.e. with final force.

The meaning of the sequence *-gAlI üčün* seems to be similar to that of *-gAlI* by itself: *ančakya ögläntürgäli üčün bir ulug sögüt üzä agtïnïp butïklarïn yalpïrgaklarïn sïp alïp ol balïk üzä ürtüp köšigä kïlïp* ... (Suv 601,22-602,2) 'so as to bring them (the fish) back a bit to their senses he climbed a big tree and plucked off its branches and leaves, spread them out above the fish and created a shade (over them)', *tïnlïglarnïŋ köŋüllärin korkïtgalï üčün* (Maitr 113r6) 'in order to frighten creatures' hearts' or *tag säŋirin yemirgäli üčün ulug toyïn ät'özin bälgürtüp* ... (Maitr 60 r 4-8) 'so as to shatter the promontory he brought forth the figure of a large monk and …'.

Both by appearance and by meaning, *-gAlI üčün* is very similar to the equally common phrase with *-gAlIr üčün*, in such examples as *elig bägkä ät'özin sävitgälir üčün* (U III 54,17) 'so as to get herself (physically) loved by the king', *bramanka altun yartmak bergälir üčün* 'so as to give gold coins to the brahman' (U III 68,29) or *katïg katgï* ... *köŋüllüg tïnlïglarïg yavalturgalïr üčün* (Maitr fol.171r4-10) 'in order to subdue creatures with a hard heart'. Other uses of *-gAlIr* and its possible origin are discussed in section 3.285. In Maitr 132r13 the longer and the shorter converb alternate: *täŋri täŋrisi burxan [... may]trinïŋ ädgüsin ärdämin [ü]küš tïnlïglarka üdintä ačgalï [...] bälgürtgälir üčün, sansïz tümän tïnlïglarka burxan kutïŋa ulug küsüš turgurgalï üčün, köp kalïn tïnlïglarka* (thus?) *tüzün maytri bodisavt birlä sokušturgalï üčün* ... 'in order to put open and show ... in order to evoke a yearning towards Buddhahood ... in order to make ... meet rightous *bodhisattva* Maitreya'. *-gAlI® üčün* may have been created to make the final content of the clauses explicit; *-gAlI* is clearly not explicit, as it also has a number of other functions and meanings.

The equally non-factive *-gU+kA* (Uygur and Qarakhanid) signifies 'so as to (do or obtain something)', giving a final meaning to the clause built around it. While *-gAlI* and the other means with final content discussed hitherto practically always have the subject of the main and subordinate clauses identical, subjects of *-gUkA* mostly differ from

those of the main clause. With no subject expressed or referred to we find, e.g.: *anïn ... bo stupug etär män änätkäkčä nom urguka* (Ht VII 1773) 'Therefore I erect this temple for placing Indian books into it'. With subject in the nominative: *altun öŋlüg yarok yaltrïklïg kopta kötrülmiš bo nom ärdinig üzäliksiz on küčlüg ugrayu ukïtu nomlaďïm sizlär kamag törtägü uzatï küyü közädü tutguka* (Suv 451,19-452,2) 'This Suvarṇaprabhāsottamasūtra I, the one with the unsurpassable ten powers, have taught and preached especially so that all four of you would keep and guard it for a long time'. As *-gU* is a projection participle suffix, the agent of the (here negative) *-gU+kA* form can also be introduced through a genitive construction: *arïg braman ugušïnïŋ arïtï üzülmägüsiŋä aďïrtlïg odgurak äzrua täŋri ök küč berti* (BT III 183-185) 'It was clearly and obviously the god Brahma himself[659] who gave the power so that the pure Brahmin caste would by no means be discontinued'. In the following instance the context would appear to indicate that the agent of the main clause and of *-gUkA* should be one and the same: *abavapur atlïg nirvanlïg balïkka kirgükä äŋ baštïnkï yeti kïrk köŋül öritgäylär* (BT III 445-448) 'So as to enter the *nirvāṇa* city called Abhavapura they will call forth the 37 very first attitudes'.

In the following passage *-gUkA* and *-gU üčün* are used in parallel manner: *kalïsïz nizvanïlarïg alkguka, kalïsïz biligsiz biligig tarkargu üčün nätäg ašaylïg adroklarï ärsär tïnlïglarka nomlayu yarlïkazun* (BT VIII B 34-36) 'In order to get the passions completely destroyed, in order to get ignorance completely removed, may he deign to preach to living beings any sorts of *āśāya* characteristics he possesses'. *sizni körgü üč[ün]* 'in order to see you' in Pothi 96 seems to be another instance of this latter construction.

Here is an instance of *-gUlXk üčün*: *bo säkiz ulug örtlüg tamular agïr tsuylug yazoklug tïnlïglarka kïy(ï)n kïzgut ... kïlguluk üčün bälgülüg bolmïš ärürlär* (Maitr 81v3, MaitrH XXV 3r21) 'These eight great fiery hells have come into existence for carrying out punishment ... to creatures with grave sins'. See p.306 for *-gUlXk*.

tep 'saying' subordinates not only direct speech and content of thought (as discussed in section 4.7) but also intentions, thus being a conjunction for final clauses: *maytri burxanka tušalïm tep bir maytri suu bäzätdimiz* 'We have had the Maitreya prologue embellished in the hope of meeting (or 'so as to meet') Buddha Maitreya'. With the *tep* clause to the right of the main clause we have *bo iki yegirmi törlüg*

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[659] Thus if we read *ök*. Another possiblity is to read *ög* and translate 'give sense and power'.

törösüz užaklar bitiglärig ol biligsiz tïnlïglar tutarlar, adasïz tudasïz ärälim tep (TT VI 260) 'Those ignorant creatures observe these twelve types of untraditional texts and writings hoping to keep away from harm' or *üzäki yarok täŋrilär yarlïgïŋa kudï inärlär, kamag budunka ögläri täg kaŋlarï täg bolzun tep* (TT VI 253) 'Following the word of the bright gods above they come down, so as to be for the whole people like their mother and father'. Another instance with *-zUn* appears in MaitrH XX 14r25. Note that the TT VI 260 sentence is more of a stretch of direct speech in that its verb is in the 1st person plural, reflecting the subjects' speech; the 3rd person singular of TT VI 253 is merely a mark of subordination since it would have given the wrong meaning if it had been uttered by the subjects.

Very similar final clauses were already formed in Orkhon Turkic with *teyin*; here is one among the examples: *bodunug igidäyin teyin yirïgaru oguz bodun tapa, ilgärü kïtañ tatbï bodun tapa, birigärü tavgač tapa ulug sü eki yegirmi sülädim ...* (KT E28, BQ E23) 'In order to feed the people I raided against the Oguz people in the north, the Kïtañ and Tatbï peoples in the east and the Chinese in the south ...'. Orkhon Turkic also already has an example of *tep* in this function: *anï añïtayïn tep sülädim* 'I campaigned in order to intimidate him' (BQ E41). All the Orkhon Turkic examples for this construction (see the index of Tekin 1968) have volitional verb forms in the subordinate verb; this appears to be so also in Uygur. Orkhon Turkic *teyin* governing an aorist gives causal meaning.

Final clauses can also be subordinated by *kim*. We find two constructions here, depending on whether the content is indicative or not. If the speaker does not express the wish that the result may take place, this resultant situation is expressed with the conditional: *adgüg ayïgïg ymä kertgünmiš kärgäk, kim ken ökünmäsär* (TT VI 199) 'One must also believe in good and bad, so that one is not sorry afterwards'; *ymä ögi kaŋï antag ögäk sav sözläyü umagay kim ol ärn(i)ŋ köŋlin yarotsar*[660] (M I 15,3) 'Moreover his parents will not be able to say such considerate words as would enlighten that man's heart'. The speaker may also wish the content of one of two projected situations to materialize so that the content of the second (which he equally hopes for) may also come true. We find that this content is expressed by linking two volitional clauses: *ol tülnüŋ tüšin adartlayu beriŋlär kim kamag yalŋuklar ešidzünlär* (MaitrH XI 3r4) 'Please give (pl.) details on the portent of that dream so that all humans may hear (it)'. With the

[660] Archaically spelled YR'WTS'R.

polite 3rd person imperative used for the 2nd person we have *bo kutsuz kovï tïnlïglar üčün tärs biligin ayïg kïlïnčïn ketärmäk alïn čavïšïn yarlïkazun, täŋrim, kim ukzun bilzünlär* (TT VI 20-21) 'May he, my lord, for the sake of these unhappy and wretched creatures tell us the means to remove their heresies and sins so that they may understand and know'. The following, in an address to Buddha, is similar (it also appears in the same text, TT VI), but both the main and the subordinate clauses get the preterite of the copula (presumably for politeness' sake): *amtï, täŋrim, bo montag tärs tätrü biliglig tïnlïglarka köni yol orok körtgürü bergäy ärti, kim köni yolča, köni biligčä yorïzunlar ärti, tärs tätrü törö kodzunlar ärti* (TT VI 237-8) 'I wish you would now, my lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road and according to the right set of mind and should give up perverse teachings'.

Afrin Čor, the Manichæan poet, used morphological instead of syntactic means to present the same content: He also linked two volitional clauses but put the 3rd person imperative form of the first into the instrumental case, using what I take to be the blends *yarlïkazunïn* (the same verb as found in the TT VI instance just quoted) and *berzünin*. The passage has already been quoted and commented upon in section 3.231 above.

4.637. Consecutive clauses

Consecutive clauses, with which the speaker describes the result of the main clause or its justification, are generally construed analytically, with the conjunction *kim*. Orkhon Turkic does not have this conjunction; it might have had other means for forming consecutive clauses, but no such clauses happen to be attested in those sources. *kim* is also (among other tasks) used for introducing causal clauses; section 4.635 quoted a sentence whose subordinate clause could be interpreted either as causal or as consecutive. In *nä muŋ tak boltï kim antag täŋri täg ärdni täg ögüküŋüzni ölüm yeriŋä ïdur siz!* (KP 24,1-4) 'What calamity has taken place that you are sending such a jewel-like, god-like darling of yours to a place of death!' the superordinate clause is a rhetorical question.

In the following sentence the *kim* clause is also consecutive and has a structure similar to the one just quoted: *nä kärgäk boltï kim anča ämgänip bo yerkä kältiŋiz?* 'What necessity arose that you went to the trouble to come to this place?' (KP 47,3). Thus also in *bo tïnlïglar nä ayïg kïlïnč kïlmïšlar ärki, kim bo montag ažunta tugup ...* 'What sin are these creatures said to have committed, that they were born into such

an existence and ...?' (MaitrH XX 1v20) and *kimlär ärki bolar? nä a[yï]g kïlïnč kïltïlar ärki, kim montag yüräk yarïlïnčïg ämgäk tolgak täginürlär?* (MaitrH XXV 2v21) 'Who might these be? What sin might they have comitted, that they experience such heart-rending suffering?'. The main and subordinate clauses of these two Maitr examples have their subjects in common, so that one can see how they could have evolved from relative clauses with *kim*.

I have come across one instance of what I take to be a synthetic consecutive clause; its verb has the converb suffix *-gAlI*, which is otherwise used with final or temporal meaning or as supine: In *kimni üčün mini montag ämgätgäli bušï bertiŋ?* (DKPAMPb 840) 'For whom have you given me as alms to cause me so much pain?' I take *mini montag ämgät-* to be not the aim but the result of the main action; this is what the context seems to demand.

4.64. Conditional and concessive sentences

The conditional construction uses the converb ending in *-sAr* in the subordinate clause,[661] other sorts of causal relations being equally expressed by converbial means. It signifies 'if', e.g. in *agï barïm alkïnsar el törö näčük tutar biz* 'If the treasures were used up, how would we uphold the state?' (KP 9,2); *ol altun tagka tägsär siz, kök lenxwa körgäy siz* 'If you reach that golden mountain you will see blue lotuses' (KP 38,1). Contextual converbs can occasionally have conditional meaning, e.g. *yanmïšta oglanlarïmnï bulmatïn yalaŋuz älvirgü täg bolur män* (BT XIII 2,47) 'If I do not find find my children when I come back, all alone I would get insane'. One could, of course, have translated as 'Not finding my children ... I would get insane', but the meaning remains conditional. In *kim ayïg kïlïnčlïglar bo nomug arvïšïg nomlaglï nomčïg örlätgäli sakïnč sakïnsar, bo arvïšïg sözläzün* (TT VI 374) 'If any wrongdoers have the intention of annoying the teacher preaching this teaching and spell, let him pronounce this spell' the subject of the conditional clause is qualified by the indefinite human pronoun *kim*.

The *-sAr* form can also signify 'seeing that' (or 'inasmuch as'), e.g. *täŋri basmasar, yer tälinmäsär, türk bodun, eliŋin törögün käm artatï udačï ärti?* (KT IE22) 'Seeing that the sky has not pressed down (upon

[661] Ellipse of the main clause is possible, e.g. in *sakïnu täginsär biz* 'If we presume to think (about it)': This comes to introduce a train of reasoning in Ht VII 231. A highly common ellipse occurs with *nä üčün tep tesär*, literally 'If one says "Why?"': This is used as when one says, in English 'Why? Because ...' as a rhetorical figure.

you and) the earth has not opened (beneath you), oh Turk nation, who could have been able to destroy your land and your government?' Similarly in Buddhist MaitrH XV 10r6:[662] *ayagka tägimlig maytri bodisavt ... özi t(a)ršanč(a)riti ärsär ymä yiti sikiz bilgä biligin ulag sapïg nomug tetrü körüp ...* 'In as much as he is himself a *darśanacarita* (one who has attained insight), the venerable *bodhisattva* Maitreya with his sharp wisdom also sees clearly the rule of causation and ...'. In such sentences the truth of the condition is presupposed.

Sometimes we come across concessive use, such content being made explicit only by the meaning of the lexemes used and by the pragmatic demands of the context; e.g. with *bošgunsarlar tüŋlasarlar* in *bo inmelun šastr ärsär ärtiŋü täriŋ alp tüpkärgülük ärür; yinčgä yörügin kim bar ärsär tetiglär keŋ biligliglär bošgunsarlar tüŋlasarlar üküšin bilü umazlar* (Ht VIII 155) 'As for this Ying ming lun *śāstra*, it is exceedingly profound and hard to fathom; *even if* any of the clever and broad-minded people study it or listen to it, they cannot understand most of its subtle definitions.' With *ymä* 'also' the meaning can be a bit different: *savï az ärsär ymä tözüg keŋürtdäči ärür* (Ht VIII 37) '*Although* its words are few, it is an exposition of the (central) principle'. The following sentence, with *u-ma-* in the main clause as in the previous Ht example and with an indefinite pronoun in the conditional clause, is clearly also concessive: *ymä näčä otačï otïn birlä kälsär anï otayu umagay* (M I 15,7) 'Even if any number of doctors come with their herbs they will be unable to cure him'. Qarakhanid *näčä mä* compares with *ymä näčä* of the Manichæan example: *näčä mä ulïsa* (QB 1371) 'however much he howls'; *näčä mä oprak kädök ärsä, yagmurka yarar* (DLT fol.461) 'However shabby and worn it (a cloak) may be, it is useful against rain'. Schinkewitsch 1926: 77 quotes a number of concessive clauses introduced by *näčä mä* from Rabġūzī. There is no need to make 'concessive clauses' into a special grammatical class in Uygur, (as done e.g. by Ş. Tekin 1965: 49-50), as there are no clear-cut formal means of expression put to use for this purpose, and as 'although', 'even if', 'seeing that', 'inasmuch as' etc. are distinguished mainly by context. Still, as e.g. Ş. Tekin's examples in the passage mentioned show, *-sAr ymä* is a *fairly* dependable sign of concessive use in Uygur, while concessive clauses appear to have often been introduced by *näčä mä* in Muslim sources. What is common to all these contents is that the subordinate clause spells out a presupposition.

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[662] The doubts expressed by the editors in footn.39 to the translation of the text are groundless; there is no problem around this use of the conditional form.

-sAr forms can also introduce temporal clauses, as documented in section 4.633. This is often the case when the context allows only a factive interpretation. In other cases, some of them quoted in that section, both a temporal and a conditional interpretation of the clauses is possible, and the difference seems to be blurred. Here is one such sentence allowing both interpretations: *turmïš törö ol: bo kunčuylarnïŋ bägi yakïn bolmasar amranmak nizvanï olarnï artokrak örlätür* 'It is an established rule: When / Whenever / If the husbands of these women are away, the passion of lechery excites them a lot' (U III 81,25).

Conditional clauses are sometimes introduced by *apam* 'now'[663] (*apaŋ* in Qarakhanid), *kačan* 'at some point in time', *kaltï* 'if, for instance' or (only Uygur) *birök* 'however'. Sometimes we find the elements *kalï* or *k(a)ltï* opening conditional clauses; *kaltï* appears to signify 'for one' in *kaltï birök altun tilgänlig čakravart eliglär xanlar näčäkä tägi yertinčüdä [ärsärlär, ančaka tägi] yeti ärdiniläri ymä yitlinmäzlär yokadmazlar. kačan birök čakravart elig kača kïyïlguča ärsär, ötrö yeti ärdiniläri ymä özin ök yitlinürlär yokadurlar* (Suv 395,12-17) 'As long as, for one, the golden wheeled *cakravartin* kings are on earth, their seven diamonds will not disappear; if, however, a *cakravartin* king should, at any time, be about to go and die, then his seven diamonds will also by themselves be annihilated'. The following passages have more than one of these particles: *apam birök bo ät'özümin titsär män, ötrö ... barčanï titmiš ïdalamïš bolur män* (Suv 614,15) 'Now if I should give up this body of mine, however, I would then have given up and renounced everything'. Here is a conditional sentence with *kalï* from DLT fol.548: *kälsä kalï katïglïk, ärtär teyü tirängil* 'If hardships should come, say it will pass and be steadfast'.

The second sentence of the Suv passage just quoted has the construction (*birök) ... -gUčA ärsär* 'if it gets to the point that ... happens', cf. also *birök tükäl [bilgü]čä ukguča ärsär* (Ht VIII 156) 'In case, however, one should reach the level of knowing (it) and understanding it fully …'. In Suv 533,15 the Skt. Petersburg ms. has *uksarlar* where an (older) Berlin ms. writes *uk-u u-guča ärsärlär*. Cf. further: *birök ol küsämiš küsüši kanmaguča ärsär ikiläyü yana ašnukï töröčä kïlsun; kačan küsüši kanguča ärsär ...* (Suv 362,14) 'In case his wish should not attain fulfillment, however, let him carry out the mentioned procedures again; if, at some point, it turns out that his wish does reach fulfillment …'; *bodisatvlar maxasatvlar munčulayu bilgüčä*

[663] Not as the time adverb but corresponding to the English particle which is its homophone; German *nun*. Nevertheless *apam* may come from *ap+am*, < **am* 'now'.

ärsärlär ... (Suv 204,2) 'Insofar as the *bodhisattvas* and *mahasttvas* are as knowledgable as this, ...'.[664]

In the instances mentioned above, there was either *-sAr* added to verbal stems or *ärsär* added to nominals or to the *-gUčA* form. *-sAr* is aspectually unmarked; complex forms are used for specification. If the event being referred to precedes the moment of speaking or the time of the main event, *ärsär* is added to a *-dI* form: *amrak oglum ölti ärsär munuŋ yüzin ymä körmäyin* (KP 67,7) 'If my dear son has died, let me not see the face of this (other) one'. The aorist followed by *ärsär* brings an outlook for the future: *yarlïg bolmaz ärsär bo yerdä yatayïn* (KP 19,7) 'If no command should be forthcoming, let me lie down in this place'; *yok ärsär* instead of *bolmaz ärsär* would have concerned the speaker's present. With the following instance the speaker is applying to a sort of oracle: *yanturu öz ulušum[ka] barïp adasïz äsän tägir ärsär män, bo xualïg psak bod[isatv]nïŋ ïdok elgintä turzun* (Ht III 919) 'If I am to return to my own country and arrive there safe and sound, may this wreath cling to the *bodhisattva* (statue)'s holy hand'. Numerous examples for *-mIš ärsär* are mentioned in UW 403b (§19e of the entry), e.g. *abidarim täŋri burxan yarlïkamiš ärmäsär* (Abhi A 84a11) 'If the divine Buddha had not created *abhidharma*, ...'. The negative counterpart of *-mIš* is here *-mAdOk*: *köz ärklig artamadok ärsär* (Abhi B 64a12) 'If the sense of sight has not gotten impaired, ...'.

When the condition is irreal, the main verb has to be followed by *ärti*; the subordinate clause normally shows *-dI ärsär* (or other appropriate persons of the preterite form):[665] *birök aŋar sizlär kärgäk boltuŋuzlar ärsär sizlärni eltgäy ärdi* (U III 69,25) 'If it had turned out that he needed you (pl.), he would have fetched you (but in fact it was me whom he snatched away)'. A sentence with *-mAdI ärsär* in the subordinate clause and *-mAdIlAr ärti* in the main clause appears in MaitrH I 1v7-12. A further irreal sentence, with *bulmadïlar ärsär* and *bolgay ärti*, is quoted in UW 405a. In the following the main clause contains a 3rd person imperative, because the speaker would have liked the proposition to come true: *äliti kälmiš azokï alkanmadï ärsär, yersuvda uzun yašadï ärsär üküš ögrünčü mäŋü sizni birlä körzün ärti*

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[664] Another example for *-gUčA ärsär* is attested in Ht III 713. The Suv uses the construction with *är-* in 376,4 and 14, with *äšid-* in 86,13 and 99,19, with *sözlä-* in 537,5, with *bol-* in 376,8, with *tug-* in 374,17, 19 and 22, with *ornangalï u-* in 462,6, with *yadïl-* in 91,21 and with *yolat-* in 87,22. Cf. also UW 407a.

[665] In Turkish *-sA idi* or Rabġūzī's *-sA ärdi* (documented by Schinkewitsch 1926: 93 § 148) irreal conditions are instead expressed by the conditional of the lexical verb and the preterite of the copula..

(M III nr.5 r9-12) 'If the provisions which he brought along had not been used up, if he had lived a long life on earth, he would have enjoyed a lot of happiness together with you (but unfortunately he died)'.

The sentence can be irreal even if the subordinate verb is not preterite, if the then operative condition is still considered to be valid at the time of speaking: *kutlug bodis(a)vtlar ärmäsär bo yerkä näŋ tägmägäy ärti* (KP 45,3-5) 'If he weren't a blessed *bodhisattva* he would not have been able to reach this place at all (but in fact he did)'. Three further instances with the same sets of verb phrases are quoted in UW 404-5 (§23a of the entry). This holds already, with the forms *kazganmasar*, in Orkhon Turkic Tuñ 59: *Elteriš xagan kazganmasar, yok ärti ärsär, bän özüm bilgä Tuñokok kazganmasar bän yok ärtim ärsär, Kapgan xagan Türk Sir bodun yerintä bod ymä bodun yemä kiši yemä idi yok ärtäči ärti* 'If Elteriš kagan were not victorious, if he had perished, if I myself, the wise Tuñokok, were not victorious, if I had perished, there would not have remained any nation or tribe or person in the place of the Türk Sir nation'. The unrealised future in the past appears in the main clauses of all such sentences in Orkhon Turkic and Uygur.

If the subject of a *-sAr* form is evident from the context, it may not be overtly expressed at all, e.g. the second sentence in *esän tükäl täggäy siz. inčip kayu kün burxan kutïn bulsar, meni titmäŋ* (KP 40,7) 'You will arrive safe and sound. If (you) thereupon some day attain Buddhadom, do not forsake me'. Uygur *-sAr* forms with no explicit subject can also have a variable as subject, 'one' in English: *tužit täŋri yerintäki yïl sanïn sanasar ... tört mïŋ yïl ärtdi* 'if one reckons by the years of the Tuṣita country of the gods, 4000 years ... have passed'; *tiši kišiniŋ yïlïn sanagu ärsär bisamïnnï bašlap sanagu ol* (TT VII nr.12,3) 'If one is to count the years of a female person (i.e. for astrological purposes) one must count by starting from Vaiśravaṇa'. There is an important difference between a variable, where 'anyone' is meant, and general reference, which applies to 'everyone', as described in the next section; the first remains unexpressed while generalised reference is expressed by indefinite pronouns. In BlattRun 14-18 and 27-28 we have both gapping and *käm* 'whoever': *kaltï yürüŋ tašag*[666] *alsar, kïzïlsïg suv yünsär ol tašïg özi üzä tutsar kopka utgay ... tašïŋ suvï yašïl bolsar käm özintä tutsar agulug kurt koŋuz adartu umaz* 'If one takes the white stone, for instance, and there emerges a reddish liquid and one keeps that stone on oneself, one will prevail at everything. … If the liquid of the stone should be green, whoever keeps it with himself,

[666] Accusative suffix with vowel lowered by the /g/; see section 2.402.

poisonous worms and beetles will not be able to harm him'. In the second sentence a conditional clause and the correlative type of sentence described in the next section appear in parallel, making a fitting link between this and that one.

If the speaker wants the addressee to make the condition come true, he can – as in many other languages – put it into the imperative mood, thereby making a merely implicit condition: *bir äki atlïg yavlakïn üčün kara bodunum öltüŋ yetdiŋ; yana ičik, ölmäči yetmäči sän* (ŠU E5) 'Because of the wickedness of one or two knights you perished, o my people; submit again and (*if* you do that) you will neither die nor perish'. The standard conditional formulation would have been **yana ičiksär (sän), ölmäči yetmäči sän.*

The meaning of the following, with *näčä* but without the conditional form, is close to being concessive: *bo mamika kïznïŋ ät'özi ymä bäksiz mäŋüsüz ol, näčä ymä körtlä körki mäŋizi ol* (TT X 545) 'Now the body of this girl Mamika is as weak and transient as her shape and appearance is beautiful.' This is a way of saying that her body is transient *although* she is beautiful. *tömgäsin üčün* in Maitr 2r2 (*tömgäsi üčün* in parallel MaitrH Y 11a6) is by the context shown to signify 'even though they are foolish' and not 'because they are foolish'. If this is not an error on the part of the writer, it shows that matters which are 'not a hindrance' could also be represented by the causal postposition.

4.65. Correlative relativisation

Uygur (like many other Turkic languages) has a two-clause sentence pattern in which the subordinate clause contains or consists of an interrogative-indefinite pronoun and a verb form in *-sAr*, to which there is explicit (demonstrative) or implicit resumptive reference in the main clause. Constructions consisting of an indefinite pronoun + *ärsär* with no correlate, as in *özlüg ölürüp kimkä ärsär ädgü külu umaz* (U IV C122-3) 'One cannot do good to anybody by killing living beings' are discussed in section 3.134 (on interrogative-indefinite pronouns).

The construction has two distinct uses: In what appears to have been the primary use, the pronoun serves as a variable argument, the content of the main clause being understood to apply for any value of that variable. It would be wrong to speak of a relative pronoun in such cases, as that would obscure the indefinite – variable status of this element. The resulting content is equivalent to generalising relativisation. In the second use, the variable has only one value, referred to by the demonstrative of the main clause. The adverbial use

of indefinite – demonstrative correlations, e.g. when the subordinate clause has *näčä* here meaning 'in the measure that', are again a different matter, dealt with last in this section.

A simple example for the first use mentioned above is Qarakhanid *tavar kimnig*[667] *üklisä bäglik aŋar kärgäyür* 'Whoever acquires much wealth, being a *bäg* befits him'. The variable is the possessor of the subject (*tavar* 'wealth') in the subordinate clause but the dative object in the main clause; *kimniŋ* and *aŋar* are correlated. The main proposition is said to hold for whatever person's fortune grows (*ükli-*). The content can also be translated into a conditional construction: 'If anybody acquires much wealth, it befits him to become a *bäg*'. Similarly in *talkan kimnig bolsa aŋar bäkmäs katar* (DLT fol. 221) 'He who has roasted barley mixes it with syrup'. Here the main and subordinate clauses share the subject in English though not in Qarakhanid: In the sentence as it stands, *aŋar* refers back not to *kimnig* but to *talkan*. Uygur: *kimniŋ tamarï yogun bolsar kanagï yeŋil* (TT VII 42,3) 'If somebody has thick veins, it is easy to let his blood' and *kimdä birök kertgünč bar ärsär ol kiši temin čïn kiši tetir* (TT V B 112-113) 'Whoever possesses faith, however, that person is straightway called a true person'. An instance of a correlation *kimniŋ ... anïŋ* appears in TT X 273-274. *kimkä* is attested in a correlative sentence in U III 76,16. Interestingly, the majority of the instances with oblique indefinite pronouns in the conditional clause of this construction are construed around *kim* 'who' and not any other interrogative-indefinite pronoun, no doubt because of the saliency of humans above other entities.

In the examples quoted, the indefinite pronoun was in the genitive, the locative or the dative case. Normally, it is in the nominative case and (perhaps for that reason) often appears at the beginning of the subordinate clause; this is not surprising as this relative element of the subordinate clause is normally also the subject of the main clause: *kim ölüt ölürgüči ärsär, ol ayïg kïlïnč tüšin käntü özi ašayur* (U IV C 119-121) 'Whoever is a murderer, he will himself suffer the result of that sin'. *birök* 'however' is used also here, e.g. *kim birök täŋri burxannaŋ bir p(a)dakča täŋlig nom bilir ärsär, ol kälip elig bägkä sözläzün* (U III 29,16) 'However, let anybody who knows even as little as one line of the divine Buddha's teaching come and tell it to the king'. In *kim mintä ken okïsar mini atayu yarlïkasunlar* (M I 29,16-30,18) 'May whoever recites it after me graciously evoke my name' the plural form of the

[667] Dissimilated from *kimniŋ*, the genitive form, as happens in the DLT.

main verb reflects the assumption that the text will be recited by more than one person; there is no resumptive pronoun here, this plural suffix in fact taking care of anaphoric reference. Cf. *taloy ögüzkä kirür sizlär. kim ölüm adaka korksar yorïŋlar* (KP 32,3), which signifies 'You are entering the ocean. If anyone (of you) is afraid of death or danger, you may leave'; or: 'Any one (of you) who is afraid of death or danger may leave'.

With *kayu* we have e.g. *kayu korkïnčsïz yïŋak ärsär ol yïŋakta turkaru bizni uduzup eltdiŋ* (U IV C 83) 'Whichever was the fearless direction, in that direction did you always lead us'; the word *kayu* in this example is not adnominal but the predicate of a downgraded nominal sentence whose topic is *korkïnčsïz yïŋak*.

In the examples quoted, the variable consisted of the interrogative-indefinite pronoun by itself; it may also be a noun phrase containing such a pronoun (*nägü sakïnč* and *nä busuš* in the following two examples): *nägü sakïnč sakïnsar sän, bütmäz* (TT VII 28,4) 'Whatever plans you are considering, they will not materialize'. In *amtï köŋülüŋdäki nä busušuŋ sakïnčïŋ ärsär ... ïrak tarkargïl* (TT X 136) 'Get rid of any sorrow or worry there is in your heart ...' we have the verb *är-* expressing existence. Note that there was no resumptive pronoun in the main clause in these examples.[668] With an adnominal indefinite pronoun and a correlate in the main clause, e.g. *kayu kiši ög kaŋ köŋlin bertsär, ol tïnlïg tamuluk bolur* (KP 9,5) 'Any person who breaks the heart of his parents, that creature becomes a candidate for hell'. When the speaker assumes that more than one entity answers the description he gives, he can take up reference to them in the plural in his subsequent text (as already in two previously quoted examples for this construction): *kim yerči suvčï kämiči bar ärsär, ymä kälzün, teginig äsän tükäl kälürzünlär* (KP 23,4-7) 'Whatever guides, pilots or seamen there are, let them come, then, and bring the prince back safe and sound'. This construction has been called the 'internally headed strategy' of relativization, as the antecedent appears within the relative and not within the main clause.

Multiple generalising indefinite-interrogative pronouns are possible: *kayu näčä ulug eliglärkä xanlarka yazmïš ölümčilär ärsär ... kayu näčä ačmak suvsamak ämgäkin alaŋurmïš kogšamïš tïnlïglar ärsär ...* (Suv 117,4 – 118,4) 'Whichever and as many as there are people condemned to death for having sinned towards kings and rulers, … creatures

[668] Therefore, *ol* in the U IV example just quoted need not be resumptive with reference to the murderer but could also qualify the phrase *ayïg kïlïnč*.

exhausted and weakened through the suffering of hunger and thirst ...'; *kim kayu är ... bitig bititsär, ... kenki ažunlarda tuga täglök bolur* (U III 75,10) 'Whoever, whichever man ... gets letters written ..., he will be born blind in subsequent lives'.

In the following example (also with two indefinite pronouns but here not used adnominally, and an imperative in the main clause) the resumptive element is again not just a pronoun but the near-pronominal phrase *ol kiši*: *kim kayu küsäsär Ketumati känttäki ... kutlug tïnlïglar ara ätizü olorup ašagalï, birlä olorup mäŋilägäli, ol kiši ädgü kïlïnč kïlzun* (Maitr) 'Whoever wishes to enjoy residing among the blessed creatures of Ketumatī and to make music, to sit together and be happy, that person should perform good deeds'. In a sentence in Manichæan M III nr. 8 VII r2-4 the generalising *kanyu* (thus!) *kiši kim* is again taken up by resumptive *ol kiši*; note that *ol kiši* is, through left dislocation, kept in the nominative instead of the genitive case which it would be in by its task in the main clause: *kanyu kiši kim bo yarokun ärmäk[ig] k(ä)ntü köŋülin ičrä tarïmïš ärsär, ol kiši b(ä)lgüsi antag ärür*: 'Any (*kanyu*) person who (*kim*) has planted inside his own heart this existence with light, that person's mark is as follows'. Uygur and English structures are here identical.

When the resumptive pronoun is replaced or accompanied by some word signifying 'all', the reference is no longer a variable as it covers the group as a whole. In such instances the pronoun of the subordinate clause is not placed in the beginning: *tolp sansar i[či]ntäki tïnl(ï)glarïg näčä ämgätgülük tolgakguluk erintürgülük busanturguluk išlär küdüglär ärsär, barča öpkä bilig [ï]y(ï)n tätrülmäktin töröyür bälgürär* (TT II,2 41-46) 'However many matters there may be for which to cause pain and affliction to all the creatures[669] in *saṃsāra*, all (of them) come into existence and appear as a consequence of perversion by anger'. Note that the previous sentence had *barča* instead of a resumptive pronoun; in the following sentence, the two appear together: *anï körüp kamag kasï kadašï bašlap kim ol törödä yïgïlmïš näčä kišilär ärti ärsär olar barča korkup bäliŋläp ïrak täzdilär kačtïlar* (Suv 5,8) 'Seeing that, whatever persons there were, foremost among them all his family, who had assembled at that ceremony, they all got very frightened and fled far away'. *kim* 'who' here serves as relative pronoun in addition to *näčä*; I consider such *kim* to be the bridge for the emergence of *kim* as relative conjunction, documented in section 4.612.

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[669] Note that this part of the subordinate clause appears before the correlative pronoun, as in the example from U III just quoted; *näčä* has, I think, been brought forward to stress the verbs *ämgät- tolgat-* etc..

There we quoted the sentence *tün sayu ... montag sakïnč kïlsar alku tïnlïglar bo dyan sakïnčlïg kišig kim körsär burxanïg körmiš täg sävär taplayur ayayur agïrlayurlar* 'If he meditates in this way every night, all creatures who see this meditating person will love, appreciate and honour (him) as if they had seen Buddha' (TT V A 113). If this is understood to be generalising, the translation is 'all creatures, whoever sees this meditating person, …'; the resumptive pronoun (translated as 'him') is implicit.

In the following example, where *kayutïn sïŋar* 'which direction' and *antïn sïŋar* 'that direction' are in correlation, we find the secondary use to which the construction is put (referred to in the beginning of this section): *ol täŋri urïsï ... tavranu kayutïn sïŋar täŋrilär eligi xormuzta täŋri ärsär, antïn sïŋar yakïn barïp ... adaklarïnta töpösi üzä yükünüp ... ïnča tep sözlädi* (U II 29, 19-21) 'that divine boy hurriedly went into the direction in which the king Indra, the king of kings was, bowed to him by putting his head on the ground before his feet and said the following:'. By content, the noun 'direction' is qualified by the clause 'in which Buddha, the king of kings was'; Buddha was in a specific place and there is no variable as in other examples quoted in this section.

With *näčä* and *nätäg* the subordinate clause is adverbial and no longer has any affinity with relativisation: *näčä bo ... täŋrilär täŋri katunlarï ... üd ärtürürlär ärsär, näčä näčä kšan üdlär ärtsär, anča anča ... täŋri mäŋiläri ärtär barïr* (Maitr 103v4-10 = MaitrH X 1r14) 'In the measure that these ... gods and goddesses spend time ..., and ... the moments pass, in that same measure do their ... divine pleasures gradually get lost'; *kaŋï xan ögi katun ... oglïŋa näčä aytsar näŋ kiginč bermädök* 'However much his father the king and his mother the queen asked their son, he gave no answer at all' (ChristManManus, Manichæan ms. 0v11); this last has concessive content. *nätäg* is about manner and not about quantity: *nätäg taplasar ïnča kïlsun* (U III 46,1-2) 'Let him do as he likes'; *nätäg siz yarlïkasar siz, antag ok kïlu täginäyin* (MaitrH XXV 3r7) 'I will venture to act in whatever way you order (me) to'. The content and form of a sentence in U III 47,11 is very similar to the last one. *nätäg* clauses can also be comparative (cf. the end of section 4.632). In section 4.634 we deal with the correlative pairs *näčäkä tägi ... ančaka tägi* and *kayu üdün ... ol üdün*; these form temporal sentences which are also rather unlike relativization.

The first clause in the following sentence appears to be a correlative construction with no *-sAr* form: *yertinčüdäki näčä ulug yaŋï künlär bar, näŋ bo yaŋï kün birlä az ülüščäkiyä [* (ms. T III MQ 62 = U 5088

quoted in the note to BT V 438) 'Whatever there are of great New Days in this world, by no means do they [have] even the slightest part [in common] with this New Day'. The clauses *kim yerči suvčï kämiči bar ärsär* (KP 23,4), *kim bar ärsär tetiglär keŋ biligliglär* (Ht VIII 155) and *kimdä birök kertgünč bar ärsär* (TT V B 112-113) quoted above show the sequence *bar ärsär*; nevertheless the BT V instance with *bar* alone need not be an error: In the previous section I quoted a concessive sentence with *näčä* also lacking the *-sAr* form.

4.7. *Direct speech*

The most wide-spread procedure for quoting speech or thought is to have the unchanged content followed by the verb *te-* 'to say', by the quotative element *te-p* or by both: *kim "taloyka barayïn" tesär kiriŋlär* (KP 22,2) 'If anybody says "I'd like to go to sea", (then) go (pl.)!'; *öz biligsiz tärs kïlïnčïn bilmäz ukmaz kim mäniŋ ašnukï ažunta kïlmïš öz kïlïnčïm mäni ïnča ämgätür tep* (TT VI 15) 'They do not know and understand their own ignorant and wrong actions so as to say 'My own actions which I commited in a previous existence make me suffer this much'; *"sän näčük oztuŋ" tep tesär "bir kämi sïyokïn tuta üntüm" tep tedi* (KP 54,4) 'When he said "How did you save yourself?" he (i.e. the other one) said "I got out by holding on to a piece of the ship(wreck)". *qaltï* in *yaroklï karalï kaltï katïlmïš ... tepän biltimiz* (Xw 137) 'We know how light and darkness were mixed' is also an interrogative element; the passage Xw 134-138, finally, has three instances of the phrase *tepän biltimiz* subordinating a number of instances of the interrogatives *nä* 'how', *nädä ötrö* 'for what reason' and *kim* 'who'.

The use of inscriptional *te-* did not differ from Uygur usage. Where Uygur has *te-p,* runiform inscriptions have *te-yin*, formed with a different converb suffix; both are used together with verbs of hearing, saying or thinking such as *äšid-, bil-, sakïn-* or *te-* itself. In the following instance from Tuñ I W2-3 the quotation is preceded by *anča* 'thus' referring to it and by the verb of saying: *täŋri anča temiš ärinč: xan bertim ...* 'The heavens presumably spoke as follows: "I gave you a king ...".' *anča* refers to direct speech both anaphorically and cataphorically in Tuñ I S5: *anta ötrü kaganïma ötüntüm; anča ötüntüm: "... ." anča ötüntüm.* 'Thereupon I addressed my king; this is how I addressed (him): "... ." This is how I addressed (him).' In *anta añïg kiši anča bošgurur ärmiš: "..." tep anča bošgurur ärmiš* (KT S7 = BQ N5) 'There, evil people used to advise (them) as follows: "... ." Speaking thus they used to advise (them).' *savï antag* 'His speech (was) to this

effect' is a cataphoric phrase used several times in the Tuñ inscription. In the following instance of direct speech the topic *biz* is a postclitic to the predicate: *käntü özümüzni küntä ayda öŋi biz tedimiz ärsär* (Xw) 'If we said about ourselves "We are not related to sun and moon". ...'. *käntü özümüzni* is part of the matrix clause, put into the accusative case as done with subjects of verbal sentences dealt with as indirect speech (section 4.622).

The following Manichæan passage shows several interwoven quotation strategies: *"š(ï)mnug näčükläti ölürdi" tep sezik aytsar ïnča keginč bergil: "š(ï)mnu öz tülïn tägšürüp kamag yäklärkä ïnča tep tanuklayu sav berdi: 'sizlärdä almïš agu xormuzta täŋrikä atgay män ...' tedi. ..."* (M I 19,10-20,2) 'If somebody puts to you the question: "How did he (i.e. Ohrmizd) kill the Devil?" give the following answer: "Changing his own words, the devil made the following confession to all the demons: 'I will shoot the poison which I got from you at the god Hormuzta …' he said. …" In the first case *tep* is followed not by *te-* but by the verb phrase *sezik ayt-* also denoting speech: It signifies 'to ask a question'. In the second case (which includes the third and is of a type we have not mentioned hitherto) the quotation is preceded by the cataphoric demonstrative *ïnča* and another verb phrase denoting speech while, in the third, it is preceded by *ïnča tep* and a third verb phrase denoting speech (*tanuklayu sav ber-* 'to confess') and followed by *te-di.* Here is another involved instance; it has three tiers of quotation one within the other: *samtso ačarï sözlädi: "vibakida sözläyür: '«kün täŋri nägü üčün čambudvip ulušug tägzinü yorïr» tep tesär keginč berür: «karaŋku kararïgïg tarkargu üčün tägzinü yorïr»' tep. mäniŋ 'barayïn' tep sakïnmakïm ymä bo yörügkä eyin bolgu üčün sakïnur män" tep tedi* (Ht I 181-189) 'Xuanzang said: "In the Vimalakīrtinirdeśasūtra it says: «If one says 'For what purposes does the sun circumvent the world?' the answer is 'It circumvents it to dispell the dark blackness'.» My upholding of my intention to go is also so as to accord with this view."' The following is an instance of a yes/no question incorporated both by a cataphoric demonstrative and *tep*: *anï bilmädi, öŋ[räki] ävirgüčilär užikïn yörügin tükäl kültülar mu ärki tep* (Ht VII 870-2) 'He did not know whether previous translators had rendered text and meaning in their completeness'.

Direct speech can also be used as a nominal attribute within a noun phrase, provided the head is a deverbal noun denoting thought or speech, as in *tašra yorïyur teyin kü ešidip* (KT E12) 'Hearing the rumour that he had marched out'; the converb may here have been used adnominally. In Buddhist TT VB 3 there is a sentence in which a

complex expression subordinated by *tep* is adnominal to *yörüg* 'interpretation'. *ätözläriŋä asïglïg likžir tep bitig bitiyür* (TT VI 257) signifies 'They write that for them useful book called "calendar"' shows *tep* in a naming function.

teyin / *tep* can be absent: *"kim kayu ... iglig agrïglïg ämgäklig tïnl(ï)glar bar ärsär olarnï ymä enč kïlayïn" sakïnčïn oron oron sayu käzä yorïyur ärkän* (Suv 603,5-8) 'roaming around at all places with the intention of putting at their ease whatever sick and suffering creatures there are'.[670] In BT VII B41-48 there is a passage in which *sakïnmak* 'imagining' is immediately preceded by a sentence with *tïnlïglar* 'creatures' as subject and predicates ending in *kötürü turur* 'keep holding up', *ičgärü turur* 'keep introducing' and *bütürü turur* 'keep carrying out', as content of thought.

Rarely, we find the content of speech subordinated by the particle *kim*: *ötündilär kim kälürmiš ärdilär üč törlüg közünč* 'They said they had brought three types of present' (U I 6,14, Magier, a Christian text); *äšidü yarlïkazun ečim-a, kim mäniŋ bo ätözümin esirkägüm idi kälmäz* (Suv 608,23) 'Hear please, dear brother, that I do not wish to spare this body of mine'.[671] In both examples, the object clauses which were the objects of the verbs *ötün-* 'to say respectfully' and *äšidü yarlïka-* 'to deign to listen' followed the main clause. Old Turkic does not appear to subordinate any other type of object clauses with *kim*.

To sum up the means for direct quotation in Uygur: *te-* and *tep* are always preceded by either the quotation itself or by a demonstrative referring to it; *te-* can be preceded by *tep*. Other verb phrases denoting oral communication have *tep* to follow it or a demonstrative pronoun or, rarely, the particle *kim* to precede it in order to govern direct speech. Another rare possibility is to have an abstract denoting 'thought' follow its content without any sign of subordination. The most common way to quote direct speech is by merely having it followed by the sequence *tep te-*. Indirect speech, i.e. quoted speech or thought incorporated into its context, is dealt with in section 4.622 on object clauses.

In Turkic languages, the strategy of direct speech is not used only for quoting; there is no actual quoting e.g. in *yaroklï karalï kaltï katïlmiš ... tepän biltimiz* (Xw 135-6) 'we know how light and darkness were mixed' or, probably *kim "taloyka barayïn" tesär kiriŋlär* (KP 22,2),

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[670] *sakïnč+ïn* is in the instrumental case; that there should be the possessive before the case suffix does not seem too likely.

[671] The Qarakhanid sentence *elig aydï kim sen nägü ol atïŋ* (QB 583) 'The king said "Who are you, what is your name?"' was, by the editor, wrongly taken to be another case of subordination by *kim*.

which can also be translated as ‘Anybody who would like to go to sea is invited to do so’. Instances like *yel kïlayïn tesär* ‘If one wishes to bring forth wind, ...’ in l.64 of Zieme’s Wetterzauber text are common in all sorts of Uygur manuals. We also already quoted a sentence in which something formulated as direct speech renders the subject’s intention: *“kim kayu ... iglig agrïglïg ämgäklig tïnl(ï)glar bar ärsär olarnï ymä enč kïlayïn” sakïnčïn* (Suv 603,5-8) ‘with the intention of putting at their ease whatever sick and suffering creatures there are’. In section 4.636 we dealt with sentences which, as objects of *teyin* and *tep*, have the content of final clauses; in section 4.635 we quoted an Orkhon Turkic causal clause introduced by *teyin*. Uygur *tep* and inscriptional *teyin* had such extended adjunct uses as ‘in order to’, ‘for the purpose of’ or even ‘because’; Orkhon Turkic instances are listed in Tekin 1968: 380-382. Especially worth noting is the sentence *beriyä čugay yïš t²ŵg²l²t²(ŵ)n² yazï konayïn tesär türk bodun ölsükü̈g* (KT S7 and BQ N5) ‘If you intend to settle the Shi-hui mountain forest and the T. plain, oh Turk people, you might die’, where I have translated *te-* with ‘to intend’. It is not that the converbs *tep* and *teyin* became conjunctions for various tasks but rather that the quotation strategy was put to such wide use.

4.8. *Coordination and text syntax*

The text syntax of the Orkhon inscriptions is discussed in Subaşı Uzun 1995, to which the reader is herewith referred. We cannot deal with the matter in any detailed or systematic manner here (especially because our corpus is much vaster), but have selected a few topics.

Coordination is not necessarily explicit at any syntactic level: From adjectives to paragraphs, everything can by linked by merely being listed, the wider semantic and syntactic context serving as concatenator: *täŋrilär täŋri katunlarï* ‘gods and godesses’*; ogulta kïzta amrak* ‘dearer than son and daughter’; *äki ogluma yavgu šad at bertim* ‘I gave my two sons the titles ‘yavgu’ and ‘shad’ (respectively)’; *kulum küŋüm bodun* ‘the nation (consisting of) my male and female slaves’ (ŠU S9). Implicit coordination can well be contrastive: *oglum savï ädgü yavlak bälgürginčä* (KP 63,3) is ‘till news (from) my son turn out to be good (or) bad’; *bilip bilmätin* (Xw 150) ‘knowingly (or) unknowingly’ is a disjunction. In *[ka]tïg tïgrak bürtgäli yumšak iki ämigläri* (TT X 445) ‘her two breasts, firm (but) soft to touch’ the adjectives *katïg* and *tïgrak* are in obvious semantic opposition to *yumšak*. Sequences are sometimes conventional, as *tünün künün* ‘by

night and day', or binomes such as *yer suv* 'the material world' or *kam kadašïm* 'my family' (with inflexional elements repeated). Biverbs such as *sävä amrayu* 'loving' are just as common. Finite verbs follow each other in Xw 3-4, sharing subject and circumstantials: *Xormuzta täŋri beš täŋri birlä ... yäkkä süŋüšgäli kälti enti* 'The god Zerwan descended (*enti*) and came (*kälti*) together with the Fivefold God to fight the Devil'. Whole clauses sharing only the subject can also be coordinated asyndetically, as shown in the following example: *nom nomlayu ... ät'öz ürlüksüzin ukïtu ïnča tep yarlïkar* 'preaching the doctrine, explaining the body's transience, he says the following'. In the following passage two sentences are linked by sharing subjects and the suffix *+lAr* referring to them: *kim yerči suvčï kämiči bar ärsär, ymä kälzün, teginig äsän tükäl kälürzünlär* (KP 23,4-7) 'Whatever guides, pilots and seamen there are, let them come, then, and bring the prince back safe and sound'.

Apposition is also a kind of coordination, e.g. among four noun phrases in *okïyur mär̈ sirigini kut täŋrisin, küsämiš küsüšimin kanturdač[ïg] kïlmïš išimin bütürdäčig* (U I 33) 'I call upon Śrī, the goddess of happiness, who fulfills what I hoped for and brings to completion what I do'. The attested accusatives as well as the fact that the *-dAčI* forms are postposed and not preposed shows that these latter are headless relative clauses apposed in coordination. Pronouns and proper names can appear in apposition: *bo nišan mär̈ Mïŋ Tämürniŋ ol* 'This mark is mine – Mïŋ Tämür's' (USp 1,10); *y[arlï]kančučï köŋül öritip mär̈ irinč tïnlï[g]ka kšanti berü yarlïkazun* (DKPAMPb 1271) 'May he have pity and forgive me poor creature'. Note that group inflexion applies also here, so that the case suffixes are, in these two examples, appended only to the appositions.

Often, however, coordination is explicit. Between noun phrases we have inflexional coordination with *+lI* (cf. section 3.123), coordination by repeated particles as in *kün ymä tün ymä* 'both by day and by night' or *bägläri ymä bodunï ymä* 'both their aristocracy and their common people', or by repeated conjunctions, such as *ap ... ap* 'both ... and' or *azu ... azu* 'either ... or' (section 3.33); by postposing *ulatï*, as in *koy lagzïn ulatï tïnlïglarïg* 'living creatures (such as) sheep, pigs etc.' (section 4.21). In relatively late texts collective numerals are added after enumeration: *udčï buka äsän ikägü* appears, e.g., in SUK Sa11,6, 8 and 12 signifying 'Udčï and Buka Äsän'; the text documents their collective purchase of land. Sa26 documents the sale by a father and by his two sons of their son and younger brother into slavery; the sellers are mentioned (6-7) as *atasï kutlug tämür, akasï är tugmïš akasï*

toktamïš üčägü 'his father Kutlug Tämür, his elder brother Är Tugmïš and his elder brother Toktamïš'.

In Uygur and Qarakhanid, *takï* can mean 'and' or 'moreover'; as such it mostly joins larger units such as sentences. Conjunctions such as *takï* and *yana* precede the first sentence constituent. When sentences are coordinated with *ymä,* that particle is often placed after the first constituent (e.g. *ol ymä nirvan mäŋisi* 'that nirvana bliss, in turn, ...'), although it can also precede the whole sentences. In the following instance, the stretch starting with *takï ymä* sums up, as it were, all that precedes (various farmers, hunters etc., then): *amarï tïnlïglar čaxrï äŋirär yüŋ äŋirär kentir äŋirär, böz batatu kars tokïyur, takï ymä adrok uzlar käntü käntü uz išin išläyür* (KP 2,5) 'Many people make thread of wool or hemp,[672] weave cloth of linen or wool and, (in general,) various professionals carry out each his special profession'.

One element shared by parallel syntactic structures can be the finite verb: *yuyka ärkli topolgalï učuz ärmiš, yinčgä ärklig üzgäli učuz* 'that which is thin is easy to pierce, they say, that which is slim easy to break' (Tuñ). Shared elements are often bound morphemes, e.g. the accusative form of the possessive suffix in this sentence: *tamuda ... tugmïš takï ymä ... beš yol ičintä ... tugmïšïn öyür sakïnur* 'So he remembers that he was born in hell, ... that he was, moreover, born in the five walks' (MaitrH XV 1v23-25). In the following the finite verbs share the plural marker: *yer suvlar suv üzäki kemi osoglug altï törlüg täpräyür kamšayurlar* (MaitrH XX 1r2) 'The worlds shake and rock in six ways, like a ship on water'. Sequences of clauses with the *-(X)p* converb can sometimes be considered to be coordinated from the functional point of view, when *-(X)p* has no content of itself beside its joining function, but in fact merely represents the choice to subordinate.

On the other hand, mere juxtaposition can also mean semantic subordination, as in the following instance from a quite early text: *ya[rlïkanč]učï köŋül turgurup kördüm, irinč [yar]l(ï)g umugsuz ïnagsïz bo tïnlïglar montag ämgäklig [...]dA tüšmiš tururlar* (U II 4,8) 'Evoking a compassionate state of mind I realised (that) these poor and hopeless creatures had fallen into such an (existence) of suffering'. What follows *kör-düm* 'I saw' with no sign of subordination is in fact clearly the implicit object of this verb. The preposed sentence *antag ugrï boltï* in the following passage serves as an asyndetic temporal clause: *antag ugrï boltï yana ymä isig özlärintä öŋi üdürdüm ... antag*

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[672] Among the three objects of *äŋirär*, the first is a loan from Indo-Iranian related to Skt. *cakra* and denoting a 'spinning wheel' while the others denote types of thread.

ugrï boltï ol ok tïnlïglarnïŋ isig kanlarïn ičtim (Maitr 33r18-23) 'There were also times (when) I killed them / ... drank their warm blood' = 'At times I ...'. The same content is expressed with an *-(X)p* clause in *antag ugrï bolup bo üčägüdä birisin birisin titgülük ïdalaguluk käzigi kälsär* ... (TT VB 107) 'If it happens that one has to give up these three one by one, ...'. Note that the subordinate clause is the second one in the U II example, but the first one in the Maitr example.

Cohesion is a universal phenomenon, presupposed by users of any language; it is cohesion that makes the reader see that the pairs of sentences in the U II and Maitr passages just quoted have subordinative content. In Old Turkic, this presupposition makes possible (and even demands) recourse to zero anaphora, clause patterns not demanding the explicit filling of argument slots either within a sentence or among sentences: In *šïmnug utup isig özin ïdïp ... üč ay köni adištit üzä tuta yarlïkadokta* 'when he graciously defeated Māra, did away with his life and ... held him under control throughout three months', e.g., 'he' and 'him' have no explicit counterpart in the Uygur clause. Demonstrative pronouns are generally not used when reference follows from the context. In TT X 520-521 we do find an example of a demonstrative referring explicitly to the subject of the previous sentence in the anaphoric use of the genitive form *anïŋ* which also qualifies the head: *täŋri burxannïŋ*[673] *čankramit kïlu yorïmïšïn kördi. anta ok anïŋ öŋrä ažuntakï ... täŋri burxan nomïn äšidmiš tïŋlamïš ögrätigi üzä bo šlok nom köŋülintä kälti* 'He saw that the divine Buddha was walking back and forth in meditation. Immediately, through *his* experience in a previous existence of ... having heard and having listened to the teaching of the divine Buddha, the following doctrinal verse came to his mind:' Anaphoric demonstratives are not barred, then. *käntü* can also get used anaphorically: *yana ol ok yäklär ičkäklär yegädürlär tïltag bolurlar käntülärni üzä elänürlär* (TT VI 267 f.) 'Again those same demons prevail; (they, i.e. the ignorants) are the cause and (they, i.e. the demons) rule over *them* (i.e. over the ignorants)'.

Anaphoricity is achieved also by the repetition of nominals: *xan bertim, xanïŋïn kodup ičiktiŋ* (Tuñ 2-3) 'I gave you a *king* (but) you abandoned your *king* and submitted (to the Chinese);' *türk bodun tavgačka körür ärti ... türk bodun xanïn bolmayïn tavgačka adrïltï* (Tuñ 1-2) '*The Turk nation* was dependent on *China*; being without a king, *the Turk nation* separated from *China*'.

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[673] The suffix is spelled as NYQ.

Cohesion can be additionally stressed by anaphoric and cataphoric elements, by taking up lexemes from the co-text and by other means: *ančïp* (a pro-verb), *anta ötrö* (e.g. in Maitr 26A r4) or *anta ken* 'thereupon', starting sentences, link them to the previous ones. *ïnča* is a cataphoric, *anča* an anaphoric pro-adverb or pro-adjective: *ïnča sakïnč sakïnur*, for instance, signifies 'He thinks the following thoughts:'. Also for the purpose of cohesion, a segment like *anï ešidip* 'hearing that' can be placed before mention of the subject of *ešid-* (i.e. cataphorically). The following is a rhetorically motivated lexical topic chain, coherence being strengthened through the particle *ymä*: *ürüg amïl n i r v a n ta öŋi mäŋülüg m ä ŋ i bultukmaz. ol ymä nirvan mäŋisi n o m ta öŋi bulgalï bolmaz. nomug ymä b u r x a n l a r da öŋi ... nomladačï bultukmaz. mäniŋ ymä burxan kutïŋa ... kut kolmïšïm bar* 'There exists no eternal b l i s s other than peaceful *n i r v ā ṇ a*. That nirvāṇa bliss, in turn, cannot be attained other than by r e l i g i o n . Now there are no preachers of religion other than the B u d d h a s . And I have been praying for buddhahood'. *burxan kutï* is not in initial position in the last sentence because 'I' is the general topic (note that the genitive *mäniŋ* gets separated from its head) and because the chain is thereby closed.

The Orkhon inscriptions have a special method of cohesion, whereby preceding sentences are summed up in *-(X)p* clauses: *elig anča tutmïš ärinč. elig tutup ...* 'This is how they appear to have governed the country. Governing the country, they ...'; *anča tep tawgač xaganka yagï bolmïš. yagï bolup ...* 'With such words they opposed the Chinese emperor. Even though opposing him, ...'. Another form of summary turns up in *käyik yeyü tavïšgan yeyü olorur ärtimiz. ... anča olorur ärkli ...* (Tuñ I S1) 'We used to live eating venison and hares. ... While living in this way ...'. Maitr XV 13r12 has the vowel converb instead: *ötrö otgurak katag köŋlin örgünintin kudï enti. enä ïnča tep sav sözläyür* 'Then, in a clear and resolute mood, he descended from the throne. Descending he speaks the following words:'.

In the sentence *ikinti ažunta ok mu täginür azu bo ažunta ymä mü täginmäki bar?* 'Is it in the second birth that one attains it, or does attainment take place in this same birth?' the double *mU* after the elements asked about and the particle *ymä* link the two sentences. *ok* after *ažunta* and the de-finitisation of the second verb also serve in conjunction (though by different means!) to make sure that the verb is not thought to be the predicate in either sentence.

A characteristic trait are demonstratives pointing at previous segments of the sentences themselves. Most conspicuous is *anta* 'there'

taking up locative expressions of the same sentence especially in the runiform inscriptions of the Uygur steppe empire.

In Uygur the contents of a stretch of direct speech incorporated in the sentence are often again pointed at, e.g. in *"..." tep munïlayu tutuzdï* 'He admonished him saying "..."', with *munïlayu* 'thus'. Cf. *anča bošgurur ärmiš: "... ." tep anča bošgurur ärmiš* in KT S7 = BQ K5.

In what follows, the final meaning of *-gAlI* is taken up by *anï üčün*: *män sini nizvanï kadgu ... tarkarïp arxant kutïn bulturgalï anï üčün sürüp üntürdüm* 'I had you banished to make you get rid of the sorrows of passion and to find *arhathood*'. The content of converbs and converbial phrases is often taken up by *anïn*, the instrumental form of the pronoun; we find e.g. *basut berü y(a)rlïkamaklarï üzä, anïn* ... (Ht X 256) 'by their giving support, thereby', *bilgäli ukgalï yarayur üčün, anïn* ... (TT VI 383 var.) 'because it helps to know and to understand, therefore', *küyü küzätü tägintökümüz üčün, anïn* ... (Suv 401,9) 'because we have undertaken to guard (this earth), therefore', *alp kutgarguluk üčün, anïn täŋri täŋrisi burxan ... tïnlïgnïŋ köŋülin yavalturup* ... 'because (they are) difficult to save, that is why Buddha, the god of gods ... softens a creature's heart ...' (DKPAMPb 115). Another passage with such anaphorics is *kišig ... yinik körtäči, nomug učuzladačïlar üčün, anïn burxanlar anta tugmaz; köŋülläri tar, kirläri täriŋ üčün kut bulmiš tüzünlär bo tïltagïn anta barmaz* (Ht V 100-106) 'Because they humiliate people and disparage teaching, that is why Buddhas are not born there; because their minds are narrow and their filth deep, that is why *ārya*s who have found blessing do not go there'; it clearly shows that the construction is meant to add prominence to the causal phrases preposed. The matter is dealt with in Schulz 1978: 115-117. *-(X)p anïn* is found a number of times in the DLT, quoted in Johanson 1988: 146. In IrqB 35 we can read (and understand!) the text either as *urupanïn* or as *urup anïn*. The sequence may have led to the form *-(X)pAnIn*, as explained in section 3.286.

One domain where sentence-internal reference is extremely common is within conditional constructions and even more in the correlative sentences also using the *-sAr* form: Reference can there be taken up by demonstratives, by reflexives, by personal pronouns, by nominals with anaphoric possessive suffix like *üküš+in* 'most of it (acc.)' or by phrases such as *olar barča* 'all of those', *ol tašïg* 'that stone (acc.)' or *antïn sïŋar* 'in that direction'; see sections 4.64 and 4.65 for details. What is interesting is that there can be anaphoric reference in the main clause even to generalised arguments, as are expressed by 'one' in English but left unexpressed in Old Turkic; cf. the following two

instances: *yïdlamïš yïdïg alku ïnča ötkürü usar, ol tünlïg ät'özi yïpar yügmäk burxan ät'özi bolur* (TT VI 172-3) 'If one can perceive all smelled scents in this way, then that creature's (i.e. the perceiving creature's) body will become the body of the Buddha (named) "Concentration of Perfume"'; *turkaru köni kertü yorïgïn yorïsar ol temin kišika sanur* (TT VI 33-4) 'If one (Ø) continuously lives a honest and correct life, one (*ol*) will straightway be considered a human being'.

Cohesion can depend on a combination of subtle factors. Take the stretch *küčümüz bir ikinti birlä sïnalïm, biz ikigüdä kanyusï küčlügräk biz* (Wettkampf 41-44): This signifies 'Let us test our strength with each other, (to see) who of us two is the stronger', but the words 'to see' are just implicit. How do we know that the two sentences belong together? They share the lexeme *küč* 'strength' in both sentences assigned to the 1st person plural, and the information that this 1st person plural consists of two individuals. The first sentence is a sort of paraphrase of the second, since the question 'Who of us two is the stronger?' can best be answered after the test proposed in the first question.

Cohesion may also be absent: Consider the sentence *kayu üdün män beš törlüg ulug tülüg kördüm ärti, antada bärü ... olorgalï küsäyür ärtim* (MaitrH XI 4v18) 'When I had seen the 5 sorts of great dreams, from that time on had I the wish to sit ...'. The pronominal phrases *kayu üdün* and *antada bärü* are not in correlation: The subordinate clause is construed so as supply a static time frame, but the main clause takes up the time referred to in that subordinate clause as the starting point of a state of affairs existing between that previous time and the time of the main event.

Sentence interpolations are not rare; e.g.: *yinčgä yörügin kim bar ärsär tetiglär keŋ biligliglär bošgunsarlar tïŋlasarlar üküšin bilü umazlar* (Ht VIII 153) 'Even if clever and broad-minded persons – whoever there is – study and listen to its subtle definitions, they cannot understand most of it'; or perhaps one should translate: 'If any clever and broad-minded persons study …' or 'Even if persons who study it are clever and broad-minded – whoever there is – they won't be able to …'. The structure of the Old Turkic sentence, at any rate, is such that *kim bar ärsär* is interpolated. There are, in fact, several interpolations already in the Orkhon inscriptions. The most normal interpolation, so to speak, is the vocative address: *täŋri basmasar, yer tälinmäsär, türk bodun, eliŋin törögün käm artatï udačï ärti?* (KT IE22) 'As long as the sky did not press down (upon you and) the earth did not open (beneath you), oh United nation, who could have been able to destroy your land and your government?' Here are another two interpolations, in direct

speech, which are in fact different accounts of the same utterance: *aŋaru sülämäsär kačanïŋ*[674] *ärsär ol bizni – [xaganï alp ärmiš, ayg]učïsï bilgä ärmiš – kačanïŋ ärsär ölürtäči kök* (Tuñ 20-21), *yorïmasar bizni – xaganï alp ärmiš, aygučïsï bilgä ärmiš – kačanïŋ ärsär bizni ölürtäči kök* (Tuñ 29-30) 'If we do not fight them / If we do not march out, they will – their ruler is said to be valiant, their advisor wise – whatever happens, they will definitely kill us'. The first passage has the expression *kačanïŋ ärsär* both before and after the interpolation, while the second passsage has the object *bizni* both before and after it; the first passage refers to the subject of the result clause through the pronoun *ol* already before the interpolation. These are typical means for taking care of coherence to bridge the cut caused by the interpolation.

The interpolation of TibBud 42-43 has its parallel in English: *tïlïn alku keŋürü sözlämišlärim küsüšüm ol darni nom padaklarï bolzun* 'May all I speak about in detail become – I hope – incantations and verses of teaching'. The enveloping sentence is here, in fact, an asyndetic object of the hope referred to in the interpolation *küsüšüm ol* 'It is my hope'.

[674] See p.216 for this element.

CHAPTER FIVE

PRAGMATICS AND MODALITY

Pragmatics deals with speech acts and with the use to which language is put in interpersonal relationships. Normally one would not expect to find much information on pragmatics in sources from a dead language spoken in a society about which we know so little, especially when the vast majority of these sources is translated from other languages and deals with religious matters. The fact is, however, that the corpus includes many (religiously motivated) narrative texts containing numerous instances of direct speech. These show such oral characteristics as vocatives and interjections, a freer word order, situation-bound deictics, repetition, rhetorical questions and so forth; cf. *körüŋlär körüŋlär ... kač yaŋlïg körtlä kač yaŋlïg säviglig ärür* 'See, see ... in how many ways he is pretty, in how many ways lovely!'. Another characteristic of speech is the use of endearment in *+kIñA,* which can draw the noun phrases of whole passages into its tenor; it not only refers to entities 'loved' or 'pitied' by the speaker but also often signals affection for the addressee and his/her world: See section 3.111 above and OTWF section 2.1. When referring to the speaker himself, *+kIñA* expresses humility as a means of politeness. Private letters which are, in our corpus, mostly addressed to family members, are very interesting in this respect.

Some important speech acts have to do with the communication of the speaker's volition to his addressees and with what he thinks the addressees should be doing without presenting himself as the motive of the projected action; we will deal with these two types of speech acts in sections 5.1 and 5.2 respectively. Section 5.3 deals with politeness and the way the speaker positions himself in society. Getting people to do things is not, of course, the only use to which language can be put. One use is egocentric; it has to do with crying out one's feelings. This does not mean that one does not, when shouting out, disregard other people's hearing one's utterances; only that one is not, at the moment, being cooperative. One speech act which is strongly addressee-oriented but still highly non-cooperative is cursing. Other language uses do involve addressees fully, e.g. trying to catch people's attention in the first place, trying to get information out of them or arguing with them. For still

others like promising, apologizing or naming, the language may not have evolved distinctive means.

Exclamations are discussed in section 3.4. They sometimes bear phonic marks of their function, as when the DLT writes *äsiz* (a noun which served as base to the verb *äsirkä-*) as *ässiz* and defines it as 'a word of sighing at a loss'. The DLT is, in general, a good source for interjections. Dankoff & Kelly 1985: 273 list, among other categories, interjections, vocative particles, calls to animals (different calls for making kids, dogs, foals, falcons or puppies come, for inciting asses to leap females, for making them walk on when they stumble or for making them stop, for inciting oxen to drink, for inciting or restraining horses or for making them stale, for making camels kneel, for inciting rams to butt etc.). Using insults and words of abuse (listed there on p.274) is a different speech act than any of these. Dankoff & Kelly 1985: 273 also list onomatopoeica and animal sounds.

Demonstrative *anča ymä* and its contraction *ančama* do the same as exclamative *nä* (discussed below): *ančama mäŋi! ančama ädgü asïg tusu! ančama ädgü kut kïv!* (MaitrH XI 3v7) 'Such happiness! Such good favour! Such good luck and blessing!' Further exclamatory examples with *ančama* 'So ...!' are quoted in § A,b of the UW entry for *ančama*.

Questions are asked by using interrogative-indefinite pronouns or the interrogative particle *mU*, whose functioning is discussed in sections 3.343 and 4.3; note that Old Turkic interrogative sentences do not have patterns of their own but follow those of positive sentences. In section 4.4 we ask whether interrogative pronouns appear *in situ* or whether they tend to initial position. Section 3.134 deals with the interrogative pronouns themselves. Questions formed with *mU* expect answers equivalent to English 'Yes' or 'No', though there are no such sentence answers in Old Turkic proper; the DLT mentions *ävät* and a few variants of that for 'yes'. Nor are there any pro-verbs such as 'I do' or 'She doesn't': The answer (which is, of course, a different speech act) then has to be a part-echo of the question, often the predicate by itself. In DLT fol.197 we read, e.g., that the answer to *käräk mü* 'Is it necessary?' is *käräk* 'Yes it is'.

The Orkhon Turkic interrogative particle *gU* signals that the speaker expects or prepares a negative answer: *azu bo savïmda igid bar gu* (KT S10, BQ N8) signifies 'Or is there a lie in what I said?'; *Türk matï bodun bäglär, bödkä körügmä bäglär gü yaŋïltačï siz* (KT S11) 'Oh

strong (?) Turk nation and lords, oh lords who have shown allegiance till now, will you fail?'

Interrogative sentences either solicit answers, or they are rhetorical questions (which are either left for the addressee to answer for and to himself or supplied with an answer by the speaker). The pronoun *kanï* 'where?' is often (though not exclusively) used in rhetorical questions; in that case it does not expect local information as an answer but elicits the realization on the part of the addressee that the entity upon which *kanï* is predicated is missing or absent: *ellig bodun ärtim; elim amtï kanï? ... xaganlïg bodun ärtim; xaganïm amtï kanï?* (KT E9) 'I was a nation with a state; where is my state now? ... I was a nation with a ruler; where is my ruler now?'. *kanï* is used in this way also in QB 1384: *kanï? kim kutuldï ölümdin kačïp?* 'Who fled death and was saved? Where is he?' The QB has nearly 70 instances of this element; many of those are rhetorical, others do ask for answers, as a DLT example seems to do. In Ht V 4,15 (edition of Tuguševa) the king Śīlāditya asks king Kumara: *ya Kumarï elig, Tavgač t[oyïn] kanï?* 'Oh king Kumara, where is the Chinese monk?' and is then surprised to hear that the person he asked about has not come. This is not rhetorical either.

Here is a rhetorical question from a letter (UigBrief C7) written in what seems to be close to spoken language; the interpolation found in it also testifies to this: *s(ä)n mini, karï ataŋnï tesär sän – yol yer kördüŋ – kälip körüšüp barsar sän n(ä)gü bolur* 'As for me, your old father – you've seen roads and places – how would it be if you came for a while and we saw each other?' The two conditional forms in this stretch do not express conditions either; one is a topicaliser and the second serves the rhetorical purpose of the sentence. The answer to the question *muntada ymä muŋadïnčïg nägü bolgay?* (Maitr 26A r3-4) 'What could be more wondrous than this?' is clearly 'Nothing!'. Now consider *anïŋ savïn tïŋlagučï kišilär barča ïnča tep teyürlär: "bu kutsuz tïnlïgnïŋ savïn nägülük kertgünür sizlär? nägü sözläsär barča äzügläyür" tep.* (DKPAMPb 271) 'People who listen to his words all say the following: "Why do you believe the words of this wretched creature? Whatever he says, it's all lies!" Here the motive for uttering the rhetorical question is supplied straightway. In KP 5,1, the (sad) Good Prince says (among other things): *näglük tugdum män* 'Why was I born, I?'. Here the postverbal pronoun is redundant in content and grammar but takes up reference to the topic; hence its post-predicative position. It is as if he had asked: 'Why did I, of all people, have to live through this?' The expected answer is 'I shouldn't have'. In *anča ymä čoglug yalïnlïg*

közünmäz mü? (TT X 254) 'Doesn't he look so very splendid?', finally, the expected answer is 'Yes, he does.'

The following sentence is a rhetorical question with *mU* in which there is an exclamatory demonstrative: *ančа ymä čoglug yalïnlïg közünmäz mü?* (TT X 254) 'Doesn't he look so very splendid?'. Most instances quoted above with interrogatives or demonstratives have the particle *ymä* (or *mA* coming from it) following them.

The interrogative pronoun *nä* 'what' introduces exclamatory sentences as in *bo nä ämgäklig yer ärmiš!* 'What a place of suffering this turns out to be!' (KP 4,8), *nä ymä taŋ, nä ymä tavrak* 'Oh how surprising, how fast!' or *nä taŋlančïg* 'How wonderful!' (Ht III 945). *nä ymä* of the instance just quoted becomes *nä mä* in the DLT: *nä mä ädgü kiši ol* 'How good that person is!'; *nä mä yavuz näŋ ol bo* 'How bad this thing is!' (fol.539, *ol* clearly used as copula). The sentence *körüŋlär körüŋlär ... kač yaŋlïg körtlä kač yaŋlïg säviglig ärür* 'See, see ... in how many ways he is pretty, in how many ways lovely!' shows how exclamatory interrogatives may have emerged from some type of analytical object clause. The exclamatory use of interrogatives should not be confused with rhetorical questions, discussed below. In neither case does the speaker expect any new information from the addressee. The rhetorical question is a question to which the speaker (thinks he) knows the answer; exclamatory interrogatives, however, consitute no question at all: Note that *nä* in *nä ymä taŋ!* is not translated as 'what' but as 'how'.

To contradict a view held by the addressee, one adds *ärmäz* to a proposition, otherwise leaving it unchanged (here with an aorist): *burun tïl ätöz ärklig alïr ärmäz ïraktakï adkangug* (AbhiB 77b13) 'It is not correct that the senses of the nose, the tongue or the body perceive distant sense objects'. When asking the addressee to agree to a proposition he holds, the speaker adds *ärmäz mü* 'isn't it?' to it. *ančа ymä katïg kïnïg sav sözlädi ärmäz mü?* (DKPAMPb 362) 'Now that really is a strong-willed thing he said, isn't it?' or 'Isn't *that* a ... thing he said!' and *täpränčsiz boltum ärmäz mü* (Suv 626,19) are rhetorical questions; *ärmäz mü* applies to the sentence as a whole. There are further instances of *-dI ärmäz mü* in Ht VII 121 and 127.

Trying to catch somebody's attention is a different speech act from addressing by using a vocative somebody who knows he is the addressee. The interjection for calling somebody whose name one does not know is *ay*, as in *ay, kim sän?* (U I 41,5) 'Hey, who are you?'. If

one does know the name of the person whose attention one is trying to catch, one can, e.g., say *a m(a)xas(a)tvï-ya* (Ht III 779) 'O Mahāsattva'. If one is addressing somebody who knows he is the addressee, one uses only postposed *(y)a*, as in *yalŋuklarnïŋ arslanï eliglär bäglärniŋ kut täŋrisi-a* (U IV A 55) 'Oh lion of humans, god of fortune of kings and lords!', an address to a king. Beside *ay*, the DLT also mentions *kï* (the base of *kïkïr-* to 'call out to somebody') and *ač* as vocative particles; *kï* is still used in Anatolia for calling people from afar.

Cursing is a distinct speech act: Its primary use presumably was negative influence on a person's fate by magical verbal means, but, said in a person's face, it might always have been used also as a simple provocation. A Manichæan passage shows us an embedded curse, using a distinctive suffix: *bir äkintikä karganurlar alkanurlar takï ... okïšurlar "yok yodun boluŋur ... otkä örtänkä töpön tüšüŋür ..." tep sögüšürlär* (M I 9,11-14) 'They curse each other and shout at each other, abusing each other by saying "Get destroyed! Fall into fire and flames with your head downwards!"'. This is a curse addressed to the speaker's adversary; 3rd person imperatives were presumably used for cursing absent persons. *toploka tol* (DLT fol.217) also appears to curse the addressee, although Kāšġarī translates it as "May the grave be filled with him", since *tol* is a 2nd person and not a 3rd person imperative.[675] Cf. further *süprük* 'Go as sweepings without anybody caring about them' (DLT fol.382): This appears to be the imperative of an otherwise unattested *-(X)k-* derivate from *süpür-* 'to sweep'.[676]

Kāšġarī (fol.168) shows some anthropolinguistic observation ability when suggesting that one should, when reading out the Coran among crude Turks and their women, muffle the reading of verses containing the words *sikkīn*, *yumsik*, *ixtilāq* or (among the Oguz) the interrogative particle *am*: "For", he explains, "they do not understand the meaning but consider that the sounds of the words mean what they understand by them in their own language (i.e. *sik* 'the male member', *tïlak* 'clitoris' and *am* 'vulva' in the Oguz dialect respectively); so they commit a sin

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[675] *tol-* can have either the receptacle to be filled as subject, or the substance to fill the receptacle; this is unlike English, where 'to fill' is used both of the filling agent and of the filling substance. One can translate Kāšġarīs sentence as 'Get crammed into the grave'. *toploka* is presumably a simplification of *toplok+ka*, from *toplok* 'cracks in the ground' (DLT fol. 235).

[676] This formation is dealt with in OTWF section 7.24; there is no justification for Dankoff & Kelly's changing the form to *'süprül'*.

by laughing at them". Collectively laughing at unintended obscenities is clearly a pragmatic universal.

5.1. *The communication of speaker's volition*

In Old Turkic, the means used for expressing epistemic mood do not coincide with those used for volitional mood; we therefore separate the two topics and have dealt with epistemic mood in section 3.27; these two are, we think, semantically as well as pragmatically quite distinct matters. Volitional mood is usually conveyed with the forms of the volitional paradigm (q.v. in section 3.231) if the speaker's wishes, orders or entreaties are to be transmitted to the addressee or to a third party. Other topics to be discussed in this section are the expressions of hope and exhortation, the asking of permission, the expression of readiness to carry out an action and the like.

The volitional content most commonly expressed is that of the speaker telling the addressee(s) to carry out (or, if the form is negative, not to carry out) some action; in the singular, this is normally expressed by the singular 2nd person imperative form consisting of the simple stem. The form is often accompanied by the synharmonous particle *gIl*, as described in section 3.344. In many Uygur texts (though not yet in Orkhon Turkic), the 'plural' form in *-(X)ŋ* is used only for polite address to the singular, *-(X)ŋlAr* being used for the plural (polite or familiar): E.g., MaitrH XV 12v11f. has *tur-uŋ, tavran-ïŋ, sakïn-ïŋ, ïdala-ŋ* 'stand up ... hurry up ... consider ... abandon', said in an address to a king; the same passage has *odunuŋlar* 'wake up' said to a multitude.

Occasionally a future form is used for expressing a firm injunction: *ötrö kaŋï xan yarlïgkamadï, "barmagay sïn" tep tedi* (KP 19,3) 'Then his father the king did not permit (it); he said "You will not go!".

The content of the following utterances is linked to a hope: *közin körgäy ärki biz xanïmïznïŋ xanïnïŋ nomlug tilgän küniŋä muntakya ävirmišin* (Ht VII 1241) 'We might see with our eyes that the lord of our lord right here turns the wheel of *dharma* every day'; *bulgay ärki biz yeg adrok buyanïg* (Suv 609,11) 'We will maybe (or 'hopefully') attain excellent *puṇya*'. The sentences themselves need not, however, actually have expressed that hope; they could be statements about the future, meant to serve as encouragement.[677] This is what Gabain might have been thinking of when she said that *-gAy* can be used as optative.

[677] In Judaism (where the coming of the Messiah is traditionally always expected in the nearest future) the use of such expressions is (also) quite normal.

However, some of the instances of *-gAy* + *ärki* listed in UW 436b (§ III p of the entry *ärki*) express apprehension: *ïnča bolmazun ol ärdin biziŋä ada tuda kälgäy ärki* (U III 56,3) 'I hope no harm comes to us from that man'; *bušanïp išimiz [...] bütgäy ärki tep sezinti* (Ht V 6a12) 'He was worried, saying "[How could] our matter succeed?"'. It might therefore be more correct to say that *-gAy ärki* expresses emotional involvement beside its epistemological content.

-gAy ärdi expresses volitive content in a rather indirect tone: *amtï, täŋrim, bo montag tärs tätrü biliglig tïnlïglarka köni yol orok körtgürü bergäy ärti, kim köni yolča ... yorïzunlar ärti* (TT VI 237) 'I wish you would now, my lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road'. This is addressed by a *bodhisattva* to Buddha and the tone is accordingly polite, as shown, among other things, by the use of the 3rd person for the 2nd and by the addition of *ärti*. Similarly in an address to the Chinese emperor: *münlüg kadaglïg ötügümin äšidü yarlïkap bügü köŋül üzä titrämäkimin bili yarlïkagay ärdi* (Ht VII 770) 'May you deign to listen to my deficient and failing appeal and, by metaphysical spirituality, deign to know my trembling'.

Using the 1st person singular volitional form, the speaker proposes to the addressee to participate in his wish for an action he would himself like to carry out (or not to carry out if the verb is negative): The translation of *barayïn* (KP 19,1) as 'Let me go!' after all consists of an invitation to the addressee to permit the speaker to carry out the action of going. In *nätäg siz yarlïkasar siz, antag ok kïlu täginäyin* (MaitrH XXV 3r7) 'I will venture to act in whatever way you order (me) to' the speaker's volition can better be characterised as a readiness to act. When the speaker happens to be Buddha, as in the following example, the purport of the volitive form becomes practically identical with that of the future tense; in the following sentence this form thus appears together with *muna*, which here asks for the addressee's attention to an event which is about to take place: *muna amtï män ... magat eldäki tïnlïglarnïŋ isig öz korkïnčlarïn kalïsïz tarkarayïn* (TT X 125-130 as completed by Zieme in his 'Nachlese' to the text), perhaps to be translated as 'See how I intend to ... do away completely with the fear which the creatures of the land of Magadha feel concerning their life'. Another instance of *muna* with an *-(A)yIn* form appears in TT X 199-201.

As a sign of politeness, the 3rd person imperative form can be used for addressing the 2nd person: *bo kutsuz kovï tïnlïglar üčün tärs biligin ayïg kïlïnčïn ketärmäk alïn čavïšïn yarlïkazun, täŋrim, kim ukzun bilzünlär*

(TT VI 20-21) 'May he, my lord, for the sake of these unhappy and wretched creatures tell us the means to remove their heresies and sins so that they may understand and know'. Further examples of this can be found in TT X 19 and 179 (both again *yarlïkazun*) or U III 83,18. In the sentence *bodisatv tegin kaŋï kanta bo yarlïg ešidip "yarlïg bolzun, tïdmazun barayïn" tep ötünti* (KP 19,1) 'When the *bodhisattva* prince heard this order from the king his father, he addressed (him) saying 'May there be an order (that) he may not hold (me) back (but) let me go!', *yarlïg bolzun* may have been broadly equivalent to 'Please!'.

The following passage shows two different uses of the 3rd person imperative with no person reference; they are linked by implicit causality: *näŋ käyikig ölür[üp] ätin yemäzün, bizni osoglug ämgäkkä ymä tägmäzün* (MaitrH XX 13r9-13) 'One should by no means kill wild animals and eat their meat (so that) one does not get to suffer as we do'. Only the first sentence is prescriptive on the part of the speaker; the second one should more strictly correspond to the wishes of the addressee than of the speaker, who is already in hell. The following passage is similar, but here the first sentence expresses impersonal mood (section 5.2): *turkaru aš ičgü ïnča kolosïnča ašanmak kärgäk, nïzvanïlar küčlüg bolmazun, ät özkä ada kïlmazun* (M III nr.6, 12,3-5_2) 'It is necessary to have one's meals thus, at the right times, lest the vices get strong and harm the body'.

In pronominal questions coupled with mood, it is the addressee's wish that is solicited; e.g. *kayu balïkta tugayïn?* 'In which town should I be (re)born?'. *amrak ögüküm köŋlin näčük bärtäyin män?* (KP 9,7) signifies 'How should I break my darling's heart?'; this is what the speaker expects the addressees' demands to boil down to.[678] 2nd person imperatives do not appear in questions.

Particles such as *gIl* and (in Kāšġarī's language) *čU* lend special urgency to imperatives; see section 3.344 for examples. *gIl* is very common but is rarely used with negated forms. In Ht III 673, the future form *bol-gay* 'It will become' is used as a modal particle: *"sän amtï bolgay az[an] üzä agtïnïp sudur [agï]lïkïg nomlagïl" tep tedi* '(Mahākāśyapa) said "Would you please[679] now get up to the pulpit and preach the *sūtra* treasury?"' *bolgay*, which here serves as translation of

[678] The context is that the prince would like the king to give everything in the state treasury away as alms, and the treasurers have been expressing their worries about the imminent bankruptcy of the state. This is thus not a rhetorical question.

[679] The English particle *please* also, after all, comes from a modal phrase like 'if it please you', still used without truncation in French *s'il te* / *vous plait*. Concerning the use of *bol-* cf. Turkish *olur* expressing consent.

a Chinese particle used in imperial commands, is no doubt truncated from *yeg bolgay* 'It will be better' (or 'quite good') used asyndetically: Cf. *yeg bolgay ärti [...]p yep yorïlïm ärti* (Maitr 110v8) 'It would have been better (if) we had lived enjoying ...!'. The use of *yorïlïm ärti* and not **yorïdïmïz ärsär* (as in the translation) shows that the whole sentence *yeg bolgay ärti* had already become downgraded to particle status.

ärti is added to the 1st and 3rd person volitional forms to express irreal wishes: *yersuvda uzun yašadï ärsär üküš ögrünčü mäŋü sizni birlä körzün ärti, üzütlüg ädgü kïlïnčïn tükätzün ärti, tašt(ï)n sïŋar k(a)m(a)g tüzünlär [birlä] kut kïv bulu yorïzun ärti* (M III nr.5 r10-15) 'Had he lived for a long time on earth[680] he would have seen a lot of happiness together with you, he would have completed his spiritual good actions, in the public domain he would have lived finding happiness together with all righteous people (but suddenly he died)'. In *körmäyin ärti munï täg ulug ačïg ämgäkig* (Suv 626,7) 'I wish I had not seen such great and bitter suffering' the wish is shown to be irreal by the context, the speaker having just witnessed much suffering. An instance with the 1st person plural volitional form and *ärti* is quoted in the previous paragraph from Maitr 110v8. QB 1539 also has *-sUn ärti* expressing an irreal wish, in parallel to *-sA käräk ärdi* telling the reader what, in spite of reality, would have been the more appropriate course of events: *käräk ärdi bilgä tirilsä kutun / kamug ölsün ärdi biligsiz utun*; 'It would have been better to let the wise live on and be blessed; were it only that all the foolish and shameless would die!'.

Compounding the 1st and 3rd persons imperative with *ärti* can also give real wishes a more polite expression: In the sentence *täŋrikänimiz uzun özin kalïn kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) 'Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble' the wish is certainly not meant to be irreal, especially since it stands in parallelism with *berzünlär* (515) and *bolzun* (519, 522); rather, the motive for *ärti* is clearly politeness, the added content being something like 'if it were possible'. The reason why the construction is not used in the other three cases in the passage must be that their topics are not identical with the addressee; there the angels are asked to help him as well as the inner status of his realm in one case, its outer realm in the other. A similar sentence in a Buddhist text is *maytri burxan bizni körzün ärti* (MaitrH XXI 2r10) 'If only Buddha Maitreya would see

[680] This is the way the unreal condition is construed; see also section 4.64.

us!'; this hope is uttered by creatures living in hell, so that politeness and deference cannot be distinguished from the irreality of the wish as presumably felt by the speakers. Sinning creatures in MaitrH XXIII 9v4-6 express the hope that Buddha Maitreya may not see them committing their sin by using the verb phrases *körmäzün ärdi* and *ukmazun ärdi* while in XXI 3v14-16 they express the hope that they *will* see Buddha Maitreya with the clause *maytri burxanag körälim ärti* and that the community will not see them by using the form *körmäzünlär ärdi*. Further examples can be found in UW 405, § 24 of the entry for *är-*; *ärti* remains in the singular also when the lexical verb is plural.

The analytical form *-mAk+I bolzun* has optative meaning; it expresses a prayer for the person referred to in the possessive suffix: There are a number of Manichæan instances in M III nr.15 r20-24, BT V 524 or BT V 490 (*yaďïlmakï bolzun* 'may it spread'). *burxan kutïlïg* (thus!) *küsüšläri kanmakï bolzun* (DKPAMPb 486) 'may their wishes in connection with Buddhahood get fulfilled' is Buddhist, as are instances in Ht VII 757 and twice Pfahl III 26-27: Two of these have the shape *-mAk+lArI bolzun*. With the 2nd person plural we have *mäŋikä tägmäkiŋizlär bolzun* (Hochzeit 28) 'May you attain happiness!', with the 1st *biz kamagun anta burxan kutïŋa alkïš bulmakïmïz bolzun* (MaitrH Y 53) 'May we all at that point obtain blessing for attaining buddhahood!' Note that the nominal referring to the persons whom the prayer is to benefit stays in the nominative.

Giving an example for the versatile element *kalï*, DLT fol.548 brings the sentence *sän kalï barsa sän* and translated it as 'If only you had come!'. By this translation, this appears to be a way in which irreal wishes are expressed in Qarakhanid. This use presumably comes from rhetorical questions of the type *kačsa kalï kurtulur* (DLT fol.383) "How can he escape from it by fleeing?".

When the same verb is used in the conditional and then in the imperative, the speaker signals that he does not mind or care if the action is carried out; e.g. *barsar bargïl* (KP 30,6) 'Go if you want to'. Rabġūzī has this same construction (see Schinkewitsch 1926: 78 § 121); we also have it in a variety of modern Turkic languages.

As auxiliary, *kör-* 'to see' expresses a conscious effort to carry out the action described in the lexical verb (section 3.252). Its imperative is used with exhortative content: *yelü kör* 'See to it that you ride fast!' (Tuñ 26); *saklanu körgil* 'Make sure that you take care!' (TT X 426).

The use of *yämü* as defined in DLT fol.455[681] shows it asking the addressee for confirmation and consent concerning the action he is being asked to do: *sän bargïl yämü* 'You will go, won't you?'; according to Kāšġarī this is a particle meaning "Did you accept these words and memorize them in order to do what you were told?".

Injunctions and entreaties can be linked with promises, which are then put into the future; the following is from a runiform inscription from the Uygur Steppe Empire: *yana ičik, ölmäči yetmäči sän* (ŠU E5) 'submit again and (*if* you do that) you will neither die nor perish'. Similarly in Tachi 49-53 from the Mongol period: *tört yïŋakdïn bo nom ärdinig keŋürü yada beriŋlär; ogulnuŋ kïznïŋ ulagï sapïgï üzülmägäy*: 'Be so nice as to spread this doctrine jewel in all four directions (and) the chain of (your) offspring will not stop'.

Old Turkic mood can be subordinated; in the following instance, e.g., we find it in a postposed relative clause with consecutive content: *anïn amtï kamag bursaŋ kuvragdïn iki toyïn ötünü täginür män, kim küntämäk mäniŋ ävimtä ašanzunlar* (Maitr Taf 25v6-8) 'Therefore I now politely invite two monks from all communities, who may come and have meals every day at my home'. This is akin to final clauses (section 4.636), which can also have sentences with *-zUn* forms subordinated by *kim*.

5.2. *The communication of impersonal necessity*

Analytical means are available for impersonal mood, which expresses an obligation not presented as being the speaker's wish. Among them we find the very common verb phrase in *-mIš kärgäk*; e.g. *bilgä yalŋuk oglï bo nomug išidgäli ulug küsüš öritmiš kärgäk* (MaitrH XV 6r21) 'A wise person should have developed a strong wish to listen to this doctrine'. With a pronominal subject: *sän ymä amtï köŋülüŋin ïdmïš kärgäk* 'You should now let your heart roam' (U III 82,21-2). Sometimes *-mIš* has a possessive suffix referring to such a subject: *anïn män anta ažun tutmïšïm kärgäk* 'therefore I should get born there'. And sometimes the proposition is meant to apply for any (unexpressed) subject: *kirlärin tapčalarïn yumïš arïtmïš kärgäk* 'One needs to have

[681] I follow Atalay's reading. Dankoff & Kelly read '*yamu*'. Kāšġarī adds: "Its root is the word *yä* which is a particle meaning 'yes'; the *mīm* and the *wāw* are the interrogative" (i.e. *mü*). This must be equal to Turkish *emi,* which has initial stress as befits a word whose second part is *mI*, and exactly the same meaning as defined by Kāšġarī. *e* ~ *ye* is also the first part of *ävät* ~ *äwät* ~ *yämät* 'yes', with an emphatic particle discussed in section 3.341.

washed away and cleaned its dirt and filth' (Suv 142,1). While *-mIš kärgäk* may be describing what states one should strive to have attained the content of *-gU kärgäk* may be describing what one should strive for: *bo iki törlüg ädgül[ärkä tükäl]lig bolgu kärgäk* (Suv 23,7) 'One should be equipped with these two sorts of virtues'. The QB instead has *käräk* with the *-sA* form and subject pronoun in the nominative case (examples in Hacıeminoğlu 1996: 94).

The necessity expressed by *-gU ol* is anonymous in two senses: Firstly the speaker does not explicitly say that he himself wants the content of the proposition to take place (as he would with an imperative); secondly there is is no explicit or implicit reference to a subject: *kraša älgindä tutup munï sözlägü ol* (ZweiFrag r 2) 'One must hold the monk's dress in one's hand and pronounce the following:' or *turuš tütüštä saklangu ol; äd yol tilämäktä ïčangu ol* (TT I 196-7) 'One should be careful in strife; one should take care when pursuing possessions or luck'; further examples appear in BT I D 317-320 (one of them as *körmägü ol* 'one should not divine'). In late texts *-gU ol* can be contracted to *-gUl*:[682] ETŞ 20,225 has *sakïngu ol*, e.g., while the parallel passage in 231 writes *sakïngul*. The form *sakïngul* should be read also in Suv 27,15 as determined by Zieme in his reedition, against *'-gIl'* in the Radloff-Malov and Kaya editions; cf. *sakïngu ol* in Suv 25,13. The form is common in medical texts, where it signifies 'one should ...', with e.g. 17 examples in Heilk II,1 alone.

-gU ärür (as in *kirgü ärür* 'one must enter' in StabUig 155,31) and *-gU ärmäz* (as in *kakïgu ärmäz* 'one must not be angry' in Suv 443,9) have the same meaning as *-gU ol*. These are, however, also used with explicit subjects, together with the same content of anonymously motivated necessity: *bilgä yalŋuk oglï täŋri mäŋisiŋä ymä artok yapïšgu ärmäz* (MaitrH XV 5r13) 'Nor should a wise human being attach itself too much to divine pleasures', e.g., has a subject in the nominative; cf. also *käntü özläriŋä asïg tusu bolgu ärsär ymä* (Suv 230,4) 'although it is meant to be useful for themselves'.

är-di can be added to *-mIš*, *-mAk* or *-sXk* forms with *kärgäk* or to *-gU* with or without *kärgäk* for two purposes: Either the speaker speaks of a necessity in the *past* without renouncing his claim as far as the present is concerned. Another possibility is of the speaker to express an *irreal*

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[682] Zieme 1969 n.267 still thought that this was a variant of the 2nd person imperative particle *gIl* and may actually be right concerning some very late texts: The sentence *kälip körüšüp bargul* in a letter which has several Middle Turkic characteristics (UigBrief C9) is certainly very directly addressed to one person and *can* be translated as 'Come, let us see each other (and then) go (back again)'.

wish concerning an event which could have taken place at his moment of speaking but hasn't, possibly regretting that it hasn't done so but not considering a realisation in the future as relevant. We first deal with the first possibility and come back to irreal wishes below: In the following example from a letter on the Silk Road the *-gU* form receives a possessive suffix to refer to the subject and the nominal subject appears in the genitive: *kutsïnïŋ ... bergüsi ärti. bermädi, män ötädim. säkiz on beš [kar]s män berdim. ... bo munča kars kutsïda algu ol* (HamTouHou 34,11) 'K. should have given ... (for scissors); he didn't give it (and) I paid it: I gave 85 (pieces of) woolen cloth. ... This much woolen cloth should be taken from K.'. Further examples appear in confessions; in the Manichæan Xw with *-mAk* and *-sXk*: *on čaxšap(ï)t tutdokumuzta bärü üč agzïn, üč köŋülün, üč älgin bir kamag özün tükäti tutmak kärgäk ärti* (150) 'Since we observe 10 commandments it was our obligation to observe fully three by the mouth, three by the heart, three by the hand and one by the whole person'; *arïg bačag bačap täŋrikä ančolasïk kärgäk ärti* (177) 'It was necessary to observe a pure fast and to dedicate it to god'; *suyumuznï yazokumuznï bošuyu ötünmäk kärgäk ärti* (185) 'It was necessary to pray for forgiveness for our sins'. In a Buddhist confession (*-gU* with and without *kärgäk*): *bilingümüz ukungumuz kärgäk ärdi, isig amrak özümüzni ïdalamïšïmïz kärgäk ärti, adnagunuŋ isig özin üzmägümüz*[683] *ärti, adïn tïnlïg oglanïn örlätmägümüz ämgätmägümüz kärgäk ärti* (UigSün 5-8) 'We should have been aware of ourselves, given up our dear life, not have ended the lives of others and not have angered or caused pain to other living beings'. Such sentences are followed by prayers for forgiveness *in case* the confessant carried out such deeds. These are not, therefore irreal wishes. *käräk ärdi sän mä munï uksa sän* (QB 658) siginifes 'It was necessary (not 'it would have been necessary') for you as well to understand this'; this does not express an outdated necessity but is the QB construction *-sA käräk* transferred into the past.

With *-gUlXk är-* the necessity holds for the object of the verb and not its subject: *titgülük ök ärür* (TT VIII D37) is 'It definitely has to be given up'. This construction is apparently shared by the category of 'ability' (section 3.253) and volitive modality.

The modal content of *-gU* is also made irreal by preterite forms of *är-*, e.g. in QB 1089: *mäniŋ kïlkïmï aydïm ärdi saŋa / köŋül bamagu ärdiŋ*

683 The editor wrote "Nach *üzmägümüz* scheint *k(ä)rgäk* zu fehlen"; in view of the variation in the modal phrases and *bergüsi ärti* in the letter quoted above, any such addition seems unnecessary.

ämdi maŋa 'I had told you my (fickle and inconstant) nature; you should not now have fastened your heart to me'.

5.3. *The reflexion of social structure*

Verbal communication reflects social as well as personal and spiritual hierarchies. This is expressed by honorifics such as *kut* when used for addressing humans, e.g. *kaŋïm kutï* 'my honoured father' in KP 4,4; or, when a letter is addressed to *pr(a)tyadïvačï ačarï adakïŋa* (Ht VII 2063) 'to the feet of master Prajñādhvaja'.[684] Another example is the expression *nomlug ät'özüŋüz* 'your (pl.) *dharma* body', used for referring to the addressee in Ht VII 2080 in the same letter, which is not loan-translated from the Chinese original. *täŋrim*, literally 'my god', happens to have received pragmatic specialisation together with the possessive suffix: It signifies 'Your majesty!' when used in direct address, or sometimes in deferential reference to an absent person. This is not a case of lexicalisation, however, since contexts such as *mäniŋ t(ä)ŋrim, alpïm, bägräkim* 'My god, my hero, my noble one!' (M II 7,8) with the genitive of the 1st person pronoun show that the connection with the speaker was definitely kept up.

In the verbal domain deference is expressed by auxiliaries such as *yarlï(g)ka-*, approximate translation 'to graciously do something'. The original meaning of *yarlïka-* was 'to pity, commiserate', whence metonymy leads to deferential meaning when referring to actions of subjects in high position whom one honours or just wants to be polite to. The reason for its specialization to speech with meanings such as 'to order' or 'to say' is no doubt the fact that absolute rulers acted through their words. *yarlïka-* is exceedingly common; here just two examples: *atayu yarlïkazunlar* (M I 29,16; 30,17-18) 'may they please call out (my) name' or *alkïš bašik sözlägüg, ... amv(a)rd(i)šn kïlïp yïgïngug ayu y(a)rlïkadïŋïz olarka* (Pothi 226-7) 'Thou hast commanded them to say blessings and hymns, … to concentrate their mind and meditate'.

In the following clause *yarlïka-* is added to a nominal predicate, as a polite replacement for the copula: *tükäl bilgä täŋri [täŋris]i burxan bo yertinčü[dä äs]än yarlïkar ärkän ...* (Ht III 601) 'While the perfectly wise Buddha, god of gods, graciously was in good health in this world, ...'; a further such example occurs in Ht VII 1057. Governing a place name in the dative, without a lexical verb or a predicative adjective, *yarlïka-* signifies 'to come to a certain place' (the way *buyur-* can be

[684] Röhrborn emends this to 'Prajñādeva'.

used in Turkish): *onunč ayïn lagkika yarlïkadï* (Ht VII 936) 'On the 10th month he came to Luo-yang'.

The humility counterpart of *yarlïka-* 'to say' is *ötün-*, literally 'to pray, submit a petition'; its humility counterpart in the sense of 'doing graciously' is *tägin-* 'to take the liberty to do'. *ötün-* and *tägin-* are used for marking speech and action respectively, of the individual who has an inferior status. The auxiliary *ötün-* appears e.g. in *kältöküm bo tep ötünti* 'He said "These are (the circumstances of) my coming' (KP 61,2). In *[subu]di ... ötünti ayïtdï [ät]özlüg savïg köŋüldä kïlmamakïg* (BT I F 47) 'Subhūti ... begged to ask about the non-creation of bodily matters in the heart' both verbs are finite. *tägin-* appears e.g. in *bo ämig iki kata okïyu tägintim* (M I 29,9-14, Manichæan) 'I endeavoured to recite this healant twice' or *ötüg bitig kïlïp ... ïdu tägintimiz* (HtPek 89r11) 'we have humbly prepared a petition and sent it'. In *kamag bursaŋ kuvragdïn iki toyïn ötünü täginür män* (Maitr Taf 25v4-8) 'I venture to invite two monks from all communities' we find the two politeness verbs combined. Occasionally, the construction is different: *[b]o kutlug künüg küsüšlüg täginür ärtimiz* (M III nr.15, 34,13) 'We have been humbly wishing for this blessed day'. See section 3.25 for similar constructions with the vowel converb.

The sentence *tükäl Tämür tü-kyä čïzïndïm koyn yïl onunč ay beš otuzka šaču balïkta* (AvadShōg XI b5) signifies 'I the lowly slave T. have written down all of it; the 25th of the 10th month, the year of the sheep, in the city of Sh.': *tü* is a loan from Chinese, reflecting the old pronunciation of Chinese *nu* 'slave'; therefore *tü-kyä*, with the so-called diminutive suffix, is approximately 'lowly slave'. This is one example for self-depreciation found in Uygur texts; further examples of *+k(I)yA* in the service of modesty appear in OTWF 50.

Politeness is not, of course, necessarily a matter of social (or other) positioning. Another indication of deference is the use of the 3rd person for the addressee; e.g. in the following address to a brother, where it appears together with the verb *yarlïka-* and the vocative particle *(y)a*: *äšidü yarlïkazun ečim-a, kim* ... 'Please hear, dear brother, that …' (Suv 608,23). Similarly, among the same brothers: *azkya öŋrä yorïyu turzunlar; män una basa yetdim* (Suv 615,14) 'Please walk on a bit; I will have reached you in a moment!'. See TT X 19 and 179 and U III 36,9 for further examples. The sentence *täŋrikänimiz uzun özin kalïn kutun turkaru adasazan tudasazan ärmäki bolzun ärti* (BT V 516-8) 'Our majesty, I wish he were to attain a long life, that he were to live full of blessing and that he were continuously free from trouble' again shows the 3rd person, beside, of course, the title *täŋrikän* and the irreal

form of the imperative where a very real wish is obviously being expressed (as shown by the context). With the polite 3rd person imperative used for the 2nd person we have *bo kutsuz kovï tïnlïglar üčün tärs biligin ayïg kilïnčïn ketärmäk alïn čavïšïn yarlïkazun, täŋrim, kim ukzun bilzünlär* (TT VI 20-21) 'May he, my lord, for the sake of these unhappy and wretched creatures tell us the means to remove their heresies and sins so that they may understand and know'. The following, in an address to Buddha from the same text, is similar: *amtï, täŋrim, bo montag tärs tätrü biliglig tïnlïglarka köni yol orok körtgürü bergäy ärti, kim köni yolča, köni biligčä yorïzunlar ärti, tärs tätrü törö kodzunlar ärti täŋrim* (TT VI 237-8) 'I wish you would now, my Lord, graciously show such perversely thinking creatures the right way, so that they would walk along the right road, according to the right set of mind and should give up perverse teachings, my Lord'. The repeated use of *täŋri+m* 'my god' as vocative, the 3rd person reference to the addressee and the addition of *är-ti* to both the main and the subordinate clauses are all for politeness' sake. The sentence *bägim tegin nätäg yarlïkasar ol yarlïgïg bütürgäli anuk turur män* (U III 47,11) 'However my master the prince commands, I stand ready to carry out that command' is addressed to the prince mentioned in it; we see that the 3rd person is used for the 2nd person out of politeness also in the indicative.

The most wide-spread sign of politeness is the use of the plural in the 2nd person pronoun (*siz* instead of *sän*) when referring to the addressee, and in 2nd person verb forms with the addressee as subject. Thus the father of the good-thinking prince (KP 4,6) asks his son: *amrak oglum, nä üčün busušlug kältiŋiz* 'My dear son, why have you come in sadness?'. The plural polite counterpart of this form would have been *kältiŋizlär*. Similarly in the imperative, *käliŋ* can be used politely for the singular, *käliŋlär* for the plural. In *anvamïg yutuzluk al(ï)nïŋ* 'Take yourself A. as wife!' (M III 14,4$_1$) the addressee is also, of course, singular. In rare cases honorific plurality even applies to nouns, as *kutlug bodis(a)vt+lar ärmäsär bo yerkä näŋ tägmägäy ärti* (KP 45,3-5) 'If he weren't a blessed *bodhisattva* he would not have been able to reach this place at all', said of a single person.

CHAPTER SIX

NOTES ON THE LEXICON

The lexicon reflects the occupations of speakers and writers as well as their spiritual world. While the runiform inscriptions of the steppe empires have numerous horse colour terms, for instance, Uygur texts written by monks abound in religious terminology. While much of this latter terminology is borrowed, there also are numerous copy coinings: *tuyunmïš*, e.g., means 'enlightened' and thus corresponds to *buddha*, its Sanskrit source, and *tuyunmak* is equivalent to Sanskrit *bodhi* or 'enlightenment'. Scholars working on Uygur sources have been much interested in religious terminology; the fact that such a great portion of extant texts is religious makes a thorough understanding of this terminology essential for understanding them. With time, other semantic domains will also have to be looked at in greater detail; Ingeborg Hauenschild's work on animal and plant terminology (e.g. Hauenschild 2003) can here serve as model. Dankoff & Kelly 1985: 247-274 have classified all the lexemes found in the DLT into semantic domains and sub-domains. Their overall domains are nature (with sub-domains such as astronomy, weather, time, light and dark, land features and many more), animals and plants, daily life, society, spiritual life, human characteristics, activities and miscellaneous actions, the senses, abstractions and miscellaneous relationships, particles (including, among other things, a very rich collection of onomatopoeics). With this they took the first steps in research into lexical fields. Many entries in the UW constitute valuable and rich material for lexical research into Uygur, but it has as yet managed to cover only a small part of the lexicon of that largest part of Old Turkic. What we can here offer are only a few remarks on some lexicon-related matters.

When dialects differ in the lexical domain, this is by no means in all cases linked to different living conditions or to different cultures; here is one example for what I mean: *sezik* 'doubt' (together with *seziksiz* 'doubtless, undoubtedly') is highly common in Buddhist texts but not in Manichæan ones; it was also borrowed into Mongolian. Manichæan sources have *sezinč* (and *sezinčsiz*) instead (documented in OTWF 279-80). Both lexemes are, of course, derivates from *sez(i)-* 'to have an apprehension', but speakers of different dialects happen to have made different choices concerning the formative to use for this particular

content. Similarly, 'beautiful' is only *körtlä* in Manichæan texts but either *körtlä* or *körklä* in Buddhist ones, both forms ultimately coming from *kör-* 'to see'. An example from the verbal domain is *alkan-*, which is used beside its synonym *alka-* 'to call out invocations (both in cursing and praying for somebody)' in Manichæan texts, while Buddhist texts only have *alka-* (cf. OTWF 587-8).

One characteristic of the Old Turkic lexicon is the significant number of set expressions such as or *ara kir-* 'to intercede', which consist of a noun and a verb. We have set combinations with Turkic as well as with foreign nominals, e.g. *asïg tusu kïl-* 'to benefit somebody' and *kšanti kïl-* 'to confess'. Orkhon Turkic *xagan olor-*, literally 'to sit (as) king', signifies 'to rule'. *šük tur-* 'to stay quiet' comes from an onomatopoeia. Another phrase with an intransitive verb is *tuš bol-* 'to meet', which (unlike *šük tur-* and *xagan olor-*) governs direct objects. Such instances are all lexicalised: Free object incorporation is not found in Old Turkic. One well-known domain for lexical phrases are the euphemisms and circumlocutions used for 'dying', *kärgäk bol-*, *täŋri bol-* 'to become divine' or *yok bol-* in Orkhon Turkic or *ätöz kod-* 'lay down one's body' in Uygur (U III 80,6); *uč-* 'to fly (off)' or *uča bar-* 'to fly off' were also used with this meaning. Orkhon Turkic *kärgäk bol-* is a euphemism, but Uygur apparently still has it only in its literal meaning, 'to become needed'. The QB is particularly rich in loan-translated expressions copied from Persian.

Set expressions should be distinguished from internal object constructions such as *yol yorï-* 'to travel' (e.g. in MaitrH XX 13r16), the common *nom nomla-* 'to preach' or *ant antïk-* 'to swear an oath'; *yol, nom* and *ant* in these examples appear as dummy objects where no other explicit objects are to be mentioned. What is interesting about the last-mentioned phrase is that *+(X)k-* verbs (dealt with in OTWF section 5.44) are otherwise all intransitive, so that *ant* is unlikely to be filling an object slot. Though the conditioning for the appearance of such dummy objects is syntactic, their choice is phraseological. *ölüt ölür-* 'to carry out a massacre' and *čašut čašur-* 'to slander' (OTWF 310-11) are another type of *figura etymologica*, as syntagms consisting of etymologically related words are called, in which the eymological connection is certain but more opaque.

On the other hand it happens that certain implied objects are left implicit, such as *sekirt-* 'let (one's horse) jump', *yügürt-* 'let (one's horse) run' or the cases presented in Röhrborn 2000. One example is

Tuñ 35 *taŋ ün-tür-ü*, which signifies 'making (the army) get up at dawn'.

A quite conspicuous feature of the lexicon are paired lexemes in the nominal or verbal domain: Numerous lexemes are used in fixed two-word sequences to render a single notion. They are either synonyms, as inscriptional *kü sorug* 'fame', Uygur *aš azuk* 'food' (examples quoted or mentioned in UW 327), *öč käk* 'revenge' (and *öč käk al-* 'take revenge'), *töz yïltïz* 'root' or, in legal language, *čam čarïm* 'objections'; more rarely, they are determinative sequences as *isig öz* 'life', literally 'warm core'. Thirdly, they can be complementary antonyms, as *yer suv* 'country; the earth, the material world'.[685] This last is not fused morphologically, as we find e.g. the accusative *yerig suvug* in BT V 213. The joined spelling of the expression in TT X 371 is, nevertheless, iconic for lexical fusion. *tsuy erinčü* 'sin' is an example for a different matter to look out for when dealing with binomes: The first element is of foreign (Chinese), the second of Turkic origin. Examples for adjective pairs are *tütrüm tärin* 'profound' and *bay baramlïg* 'wealthy', while *yarok yaltrïk* 'gleam(y), bright(ness)' is used both nominally and adjectivally. All three show the strong tendency to alliteration, found also in *aš azuk* and *čam čarïm*. *ärt- bar-* 'to pass', *säv- amra-* 'to like', *oz- kutrul-* 'to be saved' and *ter- kuvrat-* 'to assemble' are examples for biverbs. The last three biverbs show the other strong tendency of placing the longer term second; this tendency can be observed also in *bay barïmlïg, aš azuk* and *čam čarïm*. In *ka kadaš* 'kinsmen', *yavïz yavlak* 'bad', *yul yulak* 'springs', *yüz yüzägü* or *yok yodun kül-* 'to annihilate' the two elements are etymologically related. The last four instances as well as *yadagïn yalïŋïn* 'barefoot and naked', *yaŋlok yazok* 'erroneous' (< *yaz- yaŋïl-*, where the longer element comes second), *yakïn yaguk* 'near', *yaro- yašu-* 'to gleam', *yayïl- yaykal-* 'to shake and rock', *yitlin- yokad-* 'to disappear', *yumšak yavaš* 'gentle', *yunčïg yavïz* 'evil' all show the particularly common alliteration with /y/.

Alliteration is the instrument of rote rhyme, which dominates poetic structures both in Buddhist and Manichæan verse: Words do not rhyme at the end of stanzas but at their beginning, in the manner of the alliterating couples mentioned. For rote rhyme, however, not only the consonant is important, as in binomes and biverbs, but also the vowel in the alliterating syllable; couples like *yitlin-* and *yokad-* would therefore

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[685] N. Sims-Williams has, in different publications, pointed out that this corresponds to binomes in Bactrian, Khotanese and Mongolian which signify 'irrigated land, landed property'. Mongolic *γajar usu* appears (e.g. in the Secret History and in Ordos) to have the same sacral meaning *yer suv* has in Turkic.

be of no use for rote rhyme. The Old Turkic rote rhyme appears to have been visual and not auditive: *o* can rhyme with *u, ö* with *ü, i* with *ï* and *e* and the like. Zieme 1991 is the most authoritative and exhaustive treatment of this topic.

External influences on the lexicon came mainly from Chinese, Sogdian, Sanskrit[686] and Tokharian. Qarakhanid borrowed from Arabic, Persian and other Iranian languages. The vast majority of lexemes copied from other languages is nominal. Both the Qarakhanids and the Uygurs made great efforts to translate foreign ideas, in many respects well surpassing copy coinings in modern Turkic languages.

Loan translation is a domain which would benefit much from further exploration; it occurs, e.g., when we find *kïl-ïnč* 'deed' translating Skt. *karma* because that comes from the root *kṛ* 'to do'. There are numerous such cases, e.g. the verb *süz-ül-* 'to have faith' which is calqued on Skt. *pra-√sad* 'to settle down' > 'to become limpid (because this happens after impurities settle in a liquid)' > 'to attain peace, faith'. *ädgün barmïš* (Warnke 195) is copied from Skt. *sugata* consisting of *su* 'well' and the perfect participle *gata* from the root *gam* 'to go'. Uygur has the adverbial instrumental *ädgü+n* and the perfect participle *bar-mïš+lar* 'the ones who walked'. We also have many cases where a calque takes place in a particular context but has not been adopted by the language as a whole. Cf. the passive verb stem form *yorï-l-* from intransitive *yorï-,* which was created to translate the Skt. medio-passive *caryate* in Kinkashō A,d because the root *car* is a synonym of *yorï-*. Maue 1989 deals specifically with loan translations from Sanskrit in Sanskrit-Uygur bilingual Brāhmī texts, where Sanskrit has a preverb. In some cases which he mentions, such as *anubadhnāti = eyin ulalur* 'is joined' or *vairāgya = öŋi bodolmak* 'lack of passion' the connection seems clear. In others which he mentions, such as *birgärü yïgïl-* 'to gather (intr.)', *örö kötör-* 'to lift up' or *örö tur-* 'to stand up' the fact of copying is not so evident. The author says that *tur-* is also used for the meaning 'to stand up', but it is a fact that Old Uygur *tur-* was a highly polysemic verb which *was* in need for specification. The question of what is copied and what is not, what is copied ad hoc and what has become a naturalised collocation in most cases needs more elaborate and detailed study before one can make such statements. The same holds for Röhrborn 1983, an important paper on this matter, and for Laut 2003, the most recent contribution in this domain: In the great

[686] The numerous Sanskrit loans normally reflect the Buddhist culture of the Uygurs and were borrowed through Tokharian, Sogdian or even Chinese but Zieme 2003 has pointed out a number of loans in different semantic domains.

majority of cases, the expressions Laut mentions (divided into "Lehnschöpfungen", "Lehnbedeutungen", "Lehnbildungen / Lehnübersetzungen" and "Lehnübertragung") are indeed clearly calques. Are we sure, however, that the Old Turks needed a Sanskrit source to think of *ayïg kïlïnč* as 'sin' or *ämgäk* as 'suffering'? These and numerous other terms were of course conceived of by Buddhists within the Buddhist way of looking at the world, but that would be true of practically every concept.

In Erdal 1982 and in greater elaboration in OTWF section 2.91 we mentioned that the metaphorical use to which Uygur *+lXg* is put (see section 4.122) was probably copied from Tokharian, the ultimate source being Sanskrit. Pinault 2003: 47-53 studies this phenomenon by comparing the Maitr passages in which the corresponding Tokharian suffix appears with the Uygur translations of these passages. He also points out that Khotanese also has a suffix secondarily put exactly to this use, thus showing that the phenomenon is truly areal.

Semantic shift within Old Turkic is another domain to be explored. It takes place e.g. in the words *yaman*, *ayïg* and *yavïz* which, beside signifying 'bad', also got to be used to mean 'very' (e.g. BT V 372). Another common phenomenon involving semantic shift is the movement of both nominal and verbal lexemes from concrete to abstract meaning.

The study of Old Turkic phraseology should, of course, go beyond the lexeme collocations dealt with above. One common instance for a whole sentence used phraseologically is the expression *takï nä ayïtmïš kärgäk* + accusative, which literally signifies 'What more is there to ask about (obj.)'; here are two examples among many: *täŋri täŋrisi burxan irig yavgan köŋüllüg yäk ičgäkniŋ köŋülin ymä tüzün yavaš kïlu yarlïkadï; takï nä ayïtmïš kärgäk kiši ažunïn bulmïš yalŋuklarïg* (TT X 15) 'Buddha, the god of gods, has graciously softened the hearts of coarse and evil *yakṣas* and *bhūtas*; the more so (or 'not to speak of') persons who have attained human existence'; *birök yüz öŋi öŋi anï täg bäglär bolsarlar, muntada bolup utgalï yegädgäli uguluk [är]mäzlär, takï nä ayïtmïš kärgäk yalŋuz bir, kalmašapadï eligig* (U III 9,22) 'Even if there would be 100 separate lords like him they would not be able to be present and manage to vanquish (me), not to speak of one king Kalmāṣapāda alone'.

What needs to be explored beyond phraseology are formulas characterising typical forms of texts, such as fables on one end of the spectrum, medical recipes or legal contracts on its other end; nor has there yet been any systematic study of Uygur religious formalisms and

their degree of dependence on specific foreign models. Text linguistic methods have been applied only to the Orkhon inscriptions (but not e.g. to the inscriptions of the Uygur Steppe Empire which follow these to a large extent). Let me here only mention a single Buddhist feature, the opening sentence of each of the chapters of the Maitrisimit, a text describing the coming of the future Buddha, which runs as follows: *amtï bo nomlug savïg ... +dA ukmïš kärgäk* 'Now this *dharma* matter should be imagined in (place)'; this localises the content of the chapters in particular places in the holy geography of Buddhist scripture. Practically the same formulation is found also in the beginning of the *avadāna* text edited in TT X (lines 31-33): *amtï bo savïg magat ulušta ... bilmiš ukmïš kärgäk* 'Now this matter should be known and imagined (to have taken place) in the land of Magadha'.

Research on such and other pre-formulated units of Old Turkic language must be left to a different study.

TITLE ABBREVIATIONS AND REFERENCES

The bibligraphy starting on p. 539 includes all work I have found which describes and discusses the Old Turkic language. Writings which deal with the content of Old Turkic texts or papers only trying to further their interpretation, without making statements on the language as such, have not been mentioned here, although the contribution of these latter to our understanding of the language is, of course, also highly valuable. Nor has general work on Turkic languages and their reconstructed prehistory been included, unless specific passages relevant to our topics are quoted in the present book. Adam et al. 2000 is an excellent bibliography covering research relating to the early Turks (though not quite complete concerning linguistic matters) and the reader is herewith referred to it. It exhaustively covers publications of Old Turkic texts, and on pp. 111-125 gives a full list of text reference abbreviations as used in the UW and, concerning early texts in runiform or Arabic writing not covered by the UW, in the OTWF. OTWF text reference abbreviations differing from the UW ones are also mentioned there. Old Turkic sources are in the present work referred to in the same way as in that list; text reference abbreviations given there are not repeated below: Readers trying to locate passages can consult either the UW or Adam et el. 2000. Concerning some texts which appeared too recently to be included in the last fascicle of the UW (from 1998), I have had to make up my own reference abbreviations. Below I list reference abbreviations to a) journals, b) some standard reference works (e.g. TMEN), c) works referred to in a way differing from that list (e.g. DLT) and d) texts or text collections not included there. When a source is included in Adam et al. 2000 but no abbreviation appears in the list, I only mention the number of the publication in that bibliography (e.g. Alex: Adam et al. 2000 nr. 1080); when a publication appeared too late to be included in Adam et al. 2000 (e.g. Candra), I have taken it into my bibliography. Old Turkic text publications to which there is no reference in the present work are included therein.

ABAW	*Abhandlungen der Preußischen Akademie der Wissenschaften*
Alex	Adam et al. 2000 nr. 1080
AO	*Acta Orientalia*
AoF	*Altorientalische Forschungen*
AOH	*Acta Orientalia Hungarica*
ATBVP	Adam et al. 2000 nr. 547
BeidaFu	See Yakup 2000
BSOAS	*Bulletin of the School of Oriental and African Studies*
CAJ	*Central Asiatic Journal*
Candra	See Zieme 2000
Devatā	See Zieme 2002b
Dispute	See Zieme 2001
DKPAMPb	See Shōgaito et al. 1998
DLT	See Dankoff & Kelly 1982-85
EDPT	See Clauson 1972
AnmJen	See Erdal 2002a
Erleuch	See Zieme 2002a
Gedank	See Laut 2002
Hymnus	See Wilkens 1999/2000
JA	*Journal Asiatique*

JSFOu *Journal de la Société Finno-Ougrienne*
JTS *Journal of Turkish Studies. Türklük Bilgisi Araştırmaları*
KCsA *Körösi Csoma Archivum*
Kings Adam et al. 2000 nr. 1076
KSz *Keleti Szemle*
ManBeicht See Wilkens 2002
ManTraktNeu See Wilkens 2001/2002
MATK *Milletler arası* (or *Milletlerarası*) *Türkoloji Kongresi*
MSOS, WS *Mitteilungen des Seminars für Orientalische Sprachen, Westasiatische Studien*
MSFOu *Mémoires de la Société Finno-Ougrienne*
MT *Materialia Turcica*
Myōhō Adam et al. 2000 nr. 800
NesGlaub Adam et al. 2000 nr. 1133
OLZ *Orientalistische Literaturzeitung*
OS *Orientalia Suecana*
OTWF See Erdal 1991
PhTF I See Deny et al. 1959
SA *Sov'etskaja Arxeologija*
Śāri Adam et al. 2000 nr. 1132
SBAW *Sitzungsberichte der Preussischen Akademie der Wissenschaften*
SEddTF See: *Sprachwissenschaftliche Ergebnisse der deutschen Turfan-Forschung.*
SIAL *Studies on the Inner Asian Languages*
SOF *Studia Orientalia, edidit Societas Orientalia Fennica*
ST *Sov'etskaja Tjurkologija*
Tachi See Gabain 2002.
TDA *Türk Dilleri Araştırmaları*
TDAD *Türk Dilleri Araştırmaları Dizisi*
TDAYB *Türk Dili Araştırmaları Yıllığı Belleten*
TDED *İstanbul Üniversitesi Edebiyat Fakültesi Türk Dili ve Edebiyatı Dergisi*
TibBud Adam et al. 2000 nr. 1119
TL *Turkic Languages*
TMEN See Doerfer 1963-75
TS *Tjurkologičeskij Sbornik*
TT XNachl Adam et al. 2000 nr. 1137
UAJb *Uralaltaische Jahrbücher*
UAJb N.F. *Uralaltaische Jahrbücher, Neue Folge*
Udayana See Wilkens 2003
UW See Röhrborn 1977 ff.
VdSUA *Veröffentlichungen der Societas Uralo-Altaica*
Vimala Adam et al. 2000 nr. 1152 (appeared in 2000; not 1999, as expected there)
VimalaNew See Zieme 2003a
VJa *Voprosy Jazykoznanija*
WilkKatMan See Wilkens 2000 (also Adam et al. 2000 nr. 1150)
WZKM *Wiener Zeitschrift für die Kunde des Morgenlandes*
ZDMG *Zeitschrift der Deutschen Morgenländischen Gesellschaft*
ZehnGeb See Laut 2002a
ZiemeAra See Zieme 2000a
ZiemeWind Adam et al. 2000 nr. 1101

BIBLIOGRAPHY

Abduraxmanov, G.A. 1967: *Issledovanie po starotjurkskomu sintaksisu (XI vek)* (Moskva: Nauka).

Adam, V., Laut, J.P., Weiss, A. 2000: *Bibliographie alttürkischer Studien. Ausgewählt und chronologisch angeordnet. Nebst einem Anhang: Alphabetisches Siglenverzeichnis zu Klaus Röhrborn: Uigurisches Wörterbuch, Lieferung 1-6 (1977-1998)* (Wiesbaden: Harrassowitz) Orientalistik Bibliographien und Dokumentation 9.

Adams, B.S. 1981: A feature of the izafet in the Orhon inscriptions. *TDAYB* 1978-79: 33-38.

Ajdarov, G. 1966: *Jazyk orxonskogo pamjatnika Bil'ge-kagana* (Alma-Ata).

— 1966a: Nekotoryje elementy, obščije dlja orxonskoj pis'mennosti i živyx oguzskix jazykov. *Türk Dilläri Dialektologijasy Mäsälälären / Voprosy Dialektologii Tjurkskix Jazykov* 4: 135-141.

— 1969: Orxon öskertkišteri tilindegi kömekči sözder. M.B. Balakaev et al., eds., *Issledovanija po Tjurkologii* (Alma Ata: Nauka).

— 1971: *Jazyk orxonskix pamjatnikov drevnetjurkskoj pis'mennosti VIII. veka (*Alma-Ata: Akademija Nauk Kazaxskoj SSSR).

Aksan, D. 1979: Eski Türk yazı dilinin yaşıyla ilgili yeni araştırmalar. I. *MATK* 379-387.

Alyılmaz, C. 2000: Bilge Tonyukuk yazıtları üzerine birkaç düzeltme. *TDA* 10: 103-112.

Amanžolov, A.S. 1959: Ob upravlenii proizvodnyx glagol'nyx osnov v jazyke drevnetjurkskix pamjatnikov. *Voprosy kazaxskogo jazykoznanija* (Alma Ata) 145-161.

— 1963: K voprosu ob upravlenii analitičeskix glagolov v drevnetjurkskix jazykax. *Filologičeskij Sbornik*, I (*Stat'ji aspirantov i soiskatelej*) (Alma Ata) 165-177.

— 1969: *Glagol'noe upravlenie v jazyke drevnetjurkskoj pis'mennosti (*Moskva).

— 1970: K voprosu o sootvetstvii *s* || *š* v drevnetjurkskix dialektax. *Issledovanija po ujgurskomu jazyku*, vol.2 (Alma-Ata) 167-169.

Anderson, G. D.S. 2002: Auxiliary verb constructions on Old Turkic and Altai-Sayan Turkic. Unpublished lecture held at the Frankfurt VATEC-Symposium September 2002.

Arat, R. R. 1940-42: Uygurlarda ıstılahlara dair. *Türkiyat Mecmuası* 7-8: 56-81.

— 1947: *Kutadgu Bilig. I. Metin* (Istanbul: Milli Eğitim Basımevi).

— 1963: Über die Orientations-Bezeichnungen im Türkischen. D. Sinor, ed., *Aspects of Altaic Civilization. Proceedings of the 5th Meeting of the P.I.A.C. held at Indiana University, June 4-9, 1962* (Greenwood: Westport) 177-195. Indiana University Publications. Uralic and Altaic Series 23.

— 1979: *Kutadgu Bilig. 3. İndeks* (Ankara).

Ata, A. 2002: *Harezm – Altın Ordu Türkçesi* (Istanbul) TDAD 36.

Axmetov, M.A. 1969: *Glagol v jazyke orxono-jenisejskix pamjatnikov* (Moskva).

Bang, W. 1909: Zu den köktürkischen Inschriften und den türkischen Turfan-Fragmenten. *WZKM*: 413-419.

— 1915: Zur Kritik und Erklärung der Berliner uigurischen Turfanfragmente. *SBAW* 39: 623-635.

— 1917: *Vom Köktürkischen zum Osmanischen. Vorarbeiten zu einer vergleichenden Grammatik des Türkischen. 1. Mitteilung: Über das türkische*

Interrogativpronomen (Berlin: Verlag der Königlichen Akademie der Wissenschaften).
— 1917a: Turcica. *Orientalistische Studien. Fritz Hommel zum 60. Geburtstag am 31. Juli 1914 gewidmet von Freunden, Kollegen und Schülern*. Bd. 2. Leipzig 1918. (Mitteilungen der Vorderasiatischen Gesellschaft 22 (1917))
— 1918: Zu den türkischen Zeitbestimmungen. *Túrán* 1: 91-96.
— 1919: *Vom Köktürkischen zum Osmanischen. Vorarbeiten zu einer vergleichenden Grammatik des Türkischen. 2. Mitteilung: Über einige schallnachahmende Verba. 3. Mitteilung: Das Formans -γu bei Verben auf -a usw.* (Berlin: Verlag der Königlichen Akademie der Wissenschaften).
— 1923: Das negative Verbum der Türksprachen. *SBAW* 17: 114-131.
— 1925: Turkologische Briefe aus dem Berliner Ungarischen Institut. 3. Brief: Vorläufiges über die Herkunft des türk. Ablativs. *Ungarische Jahrbücher* V: 392-410.
— 1927: Turkologische Briefe aus dem Berliner Ungarischen Institut. 4. Brief: Das privative Suffix *-sïz*. *Ungarische Jahrbücher* VII: 36-45.
— & Gabain, A.v. 1931: Analytischer Index. *SBAW*, 461-517.
Barutçu, S. 1992: Eski Türkçe *kaltı* ve *nelük* kelimeleri üzerine. *Türkoloji Dergisi* 10: 71-76.
Barutçu Özönder, S. 2001: Türkçe enklitik edatlar üzerine: çI/çU. *KÖK Araştırmalar* 3: 75-86.
Batmanov, I.A. ed. 1959: *Jazyk jenisejskix pamjatnikov drevnetjurkskoj pis'mennosti* (Frunze).
— 1964: Sledy govorov v jazyke pamjatnikov orxono-jenisejskoj pis'mennosti. *Problemy Tjurkologii i Istorii Vostokovedenija* (Kazan: Kazanskij ordena trudovogo krasnogo znameni gosudarstvennyj universitet) 116-125.
— 1968: [No title]. *Voprosy Kategorii Vremeni i Naklonenija v Tjurkskix Jazykax (Materialy Soveščanija)*. Baku: Elm, 194-197.
— 1971: *Drevnije Tjurkskije Dialekty i ix Otraženije v Sovremmenyx Jazykax* (Frunze).
Bazin, L. 1991: *Les systèmes chronologiques dans le monde turc ancien* (Budapest: Akadémiai Kiadó).
L. Bazin & P. Zieme, eds., 2000 : *De Dunhuang à Istanbul. Hommage à James Russell Hamilton* (Turnhout: Brepols) Silk Road Studies 5.
Benzing, J. 1940: Tschuwaschische Forschungen (I). Das Possessivsuffix der dritten Person. *ZDMG* 49: 251-267.
— 1952: Der Aorist im Türkischen. *UAJb* 24: 130-132.
— 1980: Review of Tekin 1968. *ZDMG* 130: 116-120.
Blagova, G.F. 1977: Problemy lingvističeskogo izučenija srednevekovyx tjurkskix tekstov (O metodike izučenija. O sootnošenii istorii pis'menno-literaturnogo jazyka i istoričeskoj grammatiki. O periodizacii istorii staropis'mennogo jazyka). *ST* 1977: 27-50.
Borovkova, T.A. 1966: O gubnyx soglasnyx v "Dīvānu Lugāt-it-Turk" Maxmūda Kāšgarī. *TS* 1966: 24-27.
Brands, H.W. 1973: *Studien zum Wortbestand der Türksprachen. Lexikalische Differenzierung, Semasiologie, Sprachgeschichte.* (Leiden)
Brendemoen, B. ed. 1991: *Altaica Osloensia. Proceedings from the 32nd Meeting of the P.I.A.C. Oslo, June 12-16, 1989* (Oslo: Universitetsforlaget).
Bretfeld S. & J. Wilkens eds. 2003: *Indien und Zentralasien. Sprach- und Kulturkontakt. Vorträge des Göttinger Symposions vom 7. bis 10. Mai 2001* (Wiesbaden: Harrassowitz).

Brockelmann, C. 1919: Maḥmūd al Kāšgharīs Darstellung des türkischen Verbalbaus. *KSz*, 29-49.
— 1921: Maḥmūd al Kāšgharī über die Sprachen und die Stämme der Türken im 11. Jahrhundert. *KCsA* I, 26-40.
— 1928: *Mitteltürkischer Wortschatz nach Maḥmūd al-Kāšgarīs Dīvān Lugāt at-Turk* (Budapest) Bibliotheca Orientalis Hungarica 1.
— 1954: *Osttürkische Grammatik der islamischen Literatursprachen Mittelasiens* (Leiden: Brill).
Caferoğlu, A. 1934: *Uygur Sözlüğü* (Istanbul: Burhaneddin Matbaası).
— 1968: *Eski Uygur Türkçesi Sözlüğü* (Istanbul: Edebiyat Fakültesi Basımevi).
— 1969: *Türk Dili Tarihi*, I (Istanbul).
Clark, L.V. 1977: Mongol elements in Old Turkic? *JSFOu* 75: 110-168.
— 1996: The early Turkic and Sarig Yugur counting systems. Emmerick et al., 17-49.
Clauson, Sir G. 1957: The Turkish Y and related sounds. *Studia Altaica. Festschrift für Nikolaus Poppe zum 60. Geburtstag am 8. August 1957* (Wiesbaden: Harrassowitz) Ural-altaische Bibliothek 5.
— 1959: The Turkish numerals. *Journal of the Royal Asiatic Society* 19-31.
— 1961: The initial labial sounds in the Turkish languages. *BSOAS* 24: 298-306.
— 1962: *Turkish and Mongolian Studies* (London: The Royal Asiatic Society of Great Britain and Ireland).
— 1966: Three notes on Early Turkish. *TDAYB* 1-18.
— 1970: The origin of the Turkish "Runic" alphabet. *AO* 32: 51-76.
— 1972: *An Etymological Dictionary of Pre-Thirteenth-Century Turkish* (Oxford: Clarendon). Referred to as EDPT.
— 1975: The foreign elements in early Turkish. L. Ligeti ed., *Researches in Altaic Languages. Papers read at the 14th Meeting of the P.I.A.C. held in Szeged, August ... 1971.* Budapest (Bibliotheca Orientalis Hungarica 20), 43-49.
Çağatay, S. 1940-41: Uygurcada hendiadyoinlar. *Türk Dili ve Edebiyatı Araştırmaları* 1940/41: 97-144. (= S. Schakir)
— 1943: Uygurca ve Eski Osmanlıca'da instrumental °n. *Dil ve Tarih-Coğrafya Fakültesi Dergisi* I,3.
— 1943a: Uygur yazı dili. *Dil ve Tarih-Coğrafya Fakültesi Dergisi* I,5.
Dankoff, R. 1983: Yūsuf Khāss Ḥājib, *Wisdom of Royal Glory (Kutadgu Bilig). A Turko-Islamic Mirror for Princes*. Transl., ... by Robert Dankoff (Chicago: University of Chicago Press).
— & Kelly, J. eds. & translators, 1982, 1984, 1985: *Compendium of the Turkic Dialects,* by Mahmūd al-Kāshgharī. (Duxbury, Mass.: Harvard University Printing Office) 3 vols. Sources of Oriental Languages & Literatures 7, Turkish Sources VII.
Deny, J., et al. eds., 1959: *Philologiae Turcicae Fundamenta, I* (Aquis Matiacis: Steiner).
Doerfer, G. 1963-75: *Türkische und mongolische Elemente im Neupersischen,* vols. I-IV (Wiesbaden: Steiner) Akademie der Wissenschaften und der Literatur, Veröffentlichungen der orientalischen Kommission 19.
— 1971: Bemerkungen zur Methodik der türkischen Lautlehre. *OLZ* 66: 325-344.
— 1975-76: Proto-Turkic: Reconstruction Problems. *TDAYB* 1975-76: 1-59.
— 1975-76a: Das Vorosmanische (Die Entwicklung der oghusischen Sprachen von den Orchoninschriften bis zu Sultan Veled). *TDAYB* 1975-76:81-131.
— 1977: Zu Türkisch *bana* ‚mir' *sana* ‚dir'. *CAJ* 21: 208-214.

— 1980: K voprosu o drevnetjurkskom ï- ~ yï-. *Problemy sovremennoj tjurkologii. Materialy II vsesojuznoj tjurkologičeskij konferencii 27-29 sentjabrja 1976 g.* (Alma Ata): 379-385.
— 1981-82: Zum Vokalismus nichterster Silben im Alttürkischen. *WZKM* 73: 47-87 and 74: 103-128.
— 1981-82a: Materialien zu türk. *h-* (I) & (II). *UAJb* N.F. 1: 93-141 & 2: 138-168.
— 1982: Nomenverba in Türkischen. *Studia Turcologica Memoriae Alexii Bombaci Dicata.* (Napoli) 101-114.
— 1983: Die Lanze und der alttürkische Genitiv. *IV. MATK.* Istanbul.
— 1987: Eine sonderbare Stelle bei Maḥmūd al-Kāšγarī. *CAJ* 31: 199-208.
— 1988: *Grammatik des Chaladsch* (Wiesbaden: Harrassowitz) Turcologica 4.
— 1990: Zum sogenannten Akkusativ vor Postpositionen. Géza Bethlenfalvy et al., eds., *Altaic religious beliefs and practices. Proceedings of the 33rd Meeting of the PIAC* (Budapest) 97-101.
— 1991: Bemerkungen zur chronologischen Klassifikation des älteren Türkischen. *AoF* 18: 170-186.
— 1993: *Versuch einer linguistischen Datierung älterer osttürkischer Texte* (Wiesbaden: Harrassowitz) Turcologica 14.
— 1993a: Bemerkungen zur Transkription des Runentürkischen. *Journal of Turcology* 1: 7-22.
— 1993b: The older Mongolian layer in Ancient Turkic. *TDA* 3: 79-86.
— 1994: Zu inschrifttürkisch *ē*/*e*. *UAJb* 13: 108-132.
— 1995: Zu alttürkisch *ï- ~ yï-*. *TDA* 5: 12-18 (translation of Doerfer 1980).
— 1995a: Review of T. Tekin, *Irk Bitig. The Book of Omens.* (Wiesbaden: Harrassowitz, Turcologica 18) 1993. *CAJ* 39: 327-328.
Džumagulov, Č. 1971: *Jazyk siro-tjurkskix (nestorjanskix) pamjatnikov Kirgizii* (Frunze: Ilim).
Duran, S. 1956: Türkçede cihet ve mekân gösteren ek ve sözler. *TDAYB* 1-110.
Ehlers, G. 1983: Notabilia zur alttürkischen Oberstufenzählung. *UAJb* N.F. 3: 81-87.
— 1998: Zum Topos der Vollzähligkeit. Laut & Ölmez 1998, 73-82.
Emmerick, R. E. & Róna-Tas, A. 1992: The Turkish-Khotanese wordlist revisited. *CAJ* 36: 199-241.
— et al., eds. 1996: *Turfan, Khotan und Dunhuang. Vorträge der Tagung „Annemarie v. Gabain und die Turfanforschung", veranstaltet von der Berlin--Brandenburgischen Akademie der Wissenschaften in Berlin 9.-12. 12. 1994.* (Berlin: Akademie Verlag).
Eraslan, K. 1980: *Eski Türkçede İsim-Fiiller* (Istanbul: İ.Ü. Edebiyat Fakültesi).
— 2000: Eski Türkçede yönelme (dativ) hâli ekinin yapı, fonksiyon ve ifadeleri. *TDED* XXIX: 67-70
Ercilasun, A. B. 1984: *Kutadgu Bilig grameri. Fiil* (Ankara) Gazi Eğitim Fakültesi 3.
Erdal, M. 1976: *Voice and Case in Old Turkish.* Unpublished Ph.D. Dissertation (Jerusalem) 2 vols.
— 1979: The chronological classification of Old Turkish texts. *CAJ* 23: 151-175.
— 1979a: Die Morphemfuge im Alttürkischen. *WZKM* 71: 83-114.
— 1979b: Die Konverb- und Aoristendungen im Alttürkischen. *UAJb* 51: 104-126.
— 1982: Ein Bericht über zwei Projekte zur alttürkischen Grammatik. *UAJb,* N.F. 2: 277–280. (Summary of a lecture held at the symposium 'Neue Ergebnisse der Zentralasien-Forschung', Hamburg, 1981).
— 1984: The Turkish Yarkand documents. *BSOAS* XLVII: 260-301.
— 1985: Variable forms in the Qutadgu Bilig. In: *Istanbul ... 1985: V. MATK. I. Türk Dili,* 1. Istanbul, 79-88.

— 1986: Constraints on poetic licence in the *Qutadgu Bilig:* The converb and aorist vowels. *Türk Dili ve Edebiyatı Dergisi* 24: 205–214.
— 1988: The Turkic Nagy-Szent-Miklós inscription in Greek letters. *AOH* XLII: 221-234.
— 1991: *Old Turkic Word Formation*. Wiesbaden: Harrassowitz (Turcologica 9). 2 vols.
— 1991a: An Altaic particle *gU ? ~ !*. Brendemoen 1991, 125-139.
— 1993: *Die Sprache der wolgabolgarischen Inschriften.* Wiesbaden: Harrassowitz (Turcologica 13).
— 1994: Review of: Mark Kirchner, *Phonologie des Kasachischen*, vols. 1–2, Wiesbaden, 1992. *Oriens* 34: 553–557.
— 1996: Zum alttürkischen Vokalsystem. Emmerick et al., 67-82.
— 1997: Review of: Lars Johanson, *Strukturelle Faktoren in türkischen Sprachkontakten*, Stuttgart, 1992. *Mediterranean Language Review* 9–10: 227–234.
— 1997a: Further notes on the Irk Bitig. *TL* 1: 63-100.
— 1998: Mongolische Verbalbildung in ostsibirischen Türksprachen?. I.A. Nevskaja, ed., *Šorskaja Filologija i sravnitel'no-sopostavitel'nyje Issledovanija',* Vyp. 1. Novosibirsk, 63-76.
— 1998a: Old Turkic. Johanson & Csató 138-157.
— 1998b: 'Topic, subject and possessive compounds'. Johanson, L., ed., *The Mainz Meeting. Proceedings of the 7th International Conference on Turkish Linguistics August 3-6 1994* (Wiesbaden: Harrassowitz) 75-84.
— 2002: On the frontness opposition in loanwords in Old Uygur. *Papers in Honour of Professor Masahiro Shogaito on his 60th Birthday = SIAL* XVII: 3-23.
— 2002a: Anmerkungen zu den Jenissei-Inschriften. Ölmez & Raschmann 51-73.
— & Schönig, C. 1990: Frühtürkisch *bo* oder *bu*?. *UAJb N.F.* 9: 131-136.
— & Tezcan, S., ed., 1995: *Beläk bitig. Sprachstudien für Gerhard Doerfer zum 75. Geburtstag* (Wiesbaden: Harrassowitz) Turcologica 23.
Foy, K. 1900: Türkische Vocalstudien, besonders das Köktürkische und das Osmanische betreffend. *MSOS, WS*: 180-217.
— 1904: Die Sprache der türkischen Turfan-Fragmente in manichäischer Schrift I. *SBAW*, 1389-1403. (Reprinted in *SEddTF* III 503-517.)
Gabain, A.v. 1940: 'Die Natur des Prädikats in den Türksprachen'. *KCsA* III: 84-94.
— 1940a: 'Die Verbform °n im Uigurischen'. *Annali del R.. Istituto Superiore Orientale di Napoli, N.S.*, 1: 299-303.
— 1941: *Alttürkische Grammatik* (Wiesbaden: Harrassowitz). Reeditions appeared in 1950 and 1974.
— 1950: 'Die Pronomina im Alttürkischen.' *ZDMG* 100: 581-591.
— 1950a: 'Über Ortsbezeichnungen im Alttürkischen.' *SOF* 14/5.
— 1952: 'Zur Geschichte der türkischen Vokalharmonie'. *UAJb* 24,1-2, 49-104.
— 1954: 'Alttürkische Datierungsformen'. *UAJb* 27: 191-203.
— 1957: 'Die Bindevokale in den alttürkischen Brāhmī-Texten'. Z. V. Togan, ed., *Proceedings of the 22nd Congress of Orientalists, held in Istanbul September 15th to 22nd 1951*, vol. II: Communications (Leiden: Brill) 401-408.
— 1959: Das Alttürkische. *PhTF* I: 21-45.
— 1962: Vom Sinn symbolischer Farbenbezeichnung. *AOH* 15: 111-117.
— 1964: Die Schreiber der alt-türkischen Brāhmī-Texte. *SOF* 28/5: 3-11.
— 1970: Primäre und sekundäre Kasus im Alttürkischen. Jakobson, R. & Kawamoto, Sh., eds., *Studies in General and Oriental Linguistics.* Presented to Shirô Hattori on the occasion of his 60th Birthday. (Tokyo) 131-137.
— 1974: *Alttürkische Grammatik.* 3. Aufl. (Wiesbaden: Harrassowitz).

— 1979: *Einführung in die Zentralasienkunde* (Darmstadt: Wissenschaftliche Buchgesellschaft).
— 1982: Review of Johanson 1979. *CAJ* 26: 145-147.
— 2002: Ein uigurischer Maitreya-Text aus der Sammlung Tachibana (aus dem Nachlaß herausgegeben von Peter Zieme)'. Berlin-Brandenburgische Akademie der Wissenschaften. *Berichte und Abhandlungen* 9: 225-246
Grønbech, K. 1936: *Der türkische Sprachbau.* (Kopenhagen: Levin & Munksgaard).
— 1955: Bemerkungen über das alttürkische Verbum. *ZDMG* 105: 69-70.
Grønbech, V. 1902: *Forstudier til tyrkisk Lydhistorie* (København).
Hacıeminoğlu, N. 1996: *Karahanlı Türkçesi Grameri* (Ankara: TDK Yayınları).
Hamilton, J.R.,1977: Nasales instables en turc khotanais du Xe siècle. *BSOAS* 40: 508-521.
Hanser, O. 1975: Türkische Nebensätze in der Form direkter Rede. *Turcica* 7: 20-31.
Hauenschild, I. 2003: *Die Tierbezeichnungen bei Mahmud al-Kaschgari. Eine Untersuchung aus sprach- und kulturhistorischer Sicht* (Wiesbaden: Harrassowitz) Turcologica 53.
Hazai, G. & Zieme, P. 1970: Zu einigen Fragen der Bearbeitung türkischer Sprachdenkmäler. *Proceedings of the XIth meeting of the PIAC in Hørsholm, Denmark ... 1968*. *AO* 32: 125-140.
Hesche, W. 2001: Die Postposition *sïŋaru* ‚nach' in den Orchon-Inschriften. *TDA* 11: 33-74.
— 2002: Die Himmelsrichtungen im SW-Türkischen. *MT* 23: 53-80.
Hitch, D. 1983: A Brāhmī-Manichaean hybrid script. *Orientalia Lovaniensia Periodica* 14: 293-312.
— 1989: Old Turkic 'b' and 'p'. K. Sagaster, ed., *Religious and Lay Symbolism in the Altaic World and other papers. (27th PIAC, Walberberg 1984)* (Wiesbaden: Harrassowitz) 130-146.
Hovdhaugen, E. 1971: Turkish words in Khotanese texts. A linguistic analysis. *Norsk Tidskrift for Sprogvidenskab* 24: 163-209.
— 1974: The relationship between the two Orkhon inscriptions. *AO* 36: 55-82.
— 1979: The structure and origin of the Turkish runic alphabet. *I. MATK (İstanbul, 15-20. X. 1973). Tebliğler. 2. Türk Dili ve Edebiyatı* (Istanbul: Istanbul Üniversitesi Edebiyat Fakültesi Türkiyat Enstitüsü) 470-478.
Janhunen, J. & Rybatzki, V., eds. 1999: *Writing in the Altaic World* (Helsinki) Studia Orientalia … Finnish Oriental Society 87.
Johanson, L. 1974: Zur Syntax der alttürkischen Kausativa. *ZDMG*, Suppl. II, 529-540. (Reprinted in L. Johanson, *Linguistische Beiträge zur Gesamtturkologie.* Budapest 1991, 198-209).
— 1975: Some remarks on Turkic "Hypotaxis". *UAJb* 47: 104-118.
— 1976: Das tschuwaschische Aoristthema. *OS* 23-24 (1974/75): 106-158.
— 1979: *Alttürkisch als dissimilierende Sprache*. Akademie d. Wissenschaften und d. Literatur. Abhandlungen der Geistes- und sozialwiss. Klasse Nr. 2 (Wiesbaden).
— 1981: Review of Röhrborn 1977 ff. *AO* 42: 121-124.
— 1986: Reproduktion, Widerstand und Anpassung: zur lautlichen Iranisierung im Türkischen. Schmitt, R. & Skjærvø, P.O., eds., *Studia Grammatica Iranica. Festschrift für Helmut Humbach* (München).
— 1988: On the renewal and reinterpretation of 'instrumental' gerunds in Turkic. *Oriens* 31: 136-153.
— 1991: On syllabic frontness oppositions in Turkic. *Varia Eurasiatica. Festschrift für Professor András Róna-Tas* (Szeged) 77-94.
— 1992: Periodische Kettensätze im Türkischen. *WZKM* 82: 201-211.

— 1993: Graphie und Phonologie im Türkischen: Probleme der Lautharmonie. Werner, O., ed., *Probleme der Graphie* (Tübingen) 83-94. ScriptOralia 57.
— 1993a: Zur Anpassung von Lehnelementen im Türkischen. Laut, J.P. & Röhrborn, K., eds., *Sprach- und Kulturkontakte der türkischen Völker. Materialien der zweiten Deutschen Turkologen-Konferenz, Rauischholzhausen, 13.-16. Juli 1990* (Wiesbaden: Harrassowitz) 93-102. VdSUA 37.
— 1994: Funktion, Kompetenz und Etymon. Bemerkungen zu einer ostalttürkischen Wortbildungslehre. *CAJ* 38/2: 155-178. Refers to Erdal 1991.
— 1995: On Turkic converb clauses. Haspelmath, M. & König, E., eds., *Converbs in Cross-Linguistic perspective. Structure and Meaning of Adverbial Verb Forms – Adverbial Participles, Gerunds* – (Berlin: Mouton de Gruyter) 313-347.
— 1996: On Bulgarian and Turkic indirectives. N. Boretzky et al. eds., *Areale, Kontakte, Dialekte. Sprache und ihre Dynamik in mehrsprachigen Situationen* (Bochum: Brockmeyer) 84-94. Bochum-Essener Beiträge zur Sprachwandelforschung 24.
— 1998: The history of Turkic. Johanson and Csató, 81-125.
— 2000: Turkic indirectives. L. Johanson & B. Utas eds., *Evidentials. Turkic, Iranian and Neighbouring Languages* (Berlin: Mouton de Gruyter): 61-87.
— 2001: Vom Alttürkischen zu den modernen Türksprachen. M. Haspelmath et al. eds., *Language Typology and Language Universals. An International Handbook.* Vol. 2 (Berlin: Walter de Gruyter): 1719-1742.
— 2003: Nouns and adjectives in South Siberian Turkic. Ms. 32p; in print.
— & Csató É. Á., eds. 1998: *The Turkic Languages* (London: Routledge).
Kayra, O. K. 1994: Orhun abidelerinde sıfatlar, sıfat tamlamaları ve bunlara bağlı bazı açıklamalar. *Türk Dünyası Araştırmaları* 92: 38-52.
Kelly, J. M. 1972-73: Remarks on Kāšġarī's phonology I-II. *UAJb* 44: 179-193 & 45: 144-162.
Klaproth, J. 1820: *Abhandlung über die Sprache und Schrift der Uiguren* (Paris).
Kljaštornyj, S.G. & Livšic V.A. 1972: The Sogdian inscription of Bugut revised. *AOH* 26: 69-102, 8 pls.
Kljaštornyj, S.G. et al. eds. 1976: *Turkologica . K semidesjatiletiju akademika A.H. Kononov* (Leningrad: Nauka).
Knüppel, M., 2001: „Unregelmäßige" Getrenntschreibung der uigurischen Schrift in manichäisch-türkischen Texten. *TDA* 11: 171-185.
— 2002: Zu -''/ -ww/ -yy in manichäisch-türkischen Texten. *MT* 23: 45-52.
Kobešavidze, I.N., 1972: K xarakteristike grafiki i fonemnogo sostava jazyka orxono-jenisejskix nadpisej. *ST* 1972,2: 69-102.
— 1972a: Razgraničnije sfer glagol'nogo slovoobrazovanija i slovoizmenenija v jazyke orxono-jenisejskix nadpisej. *ST* 1972,5: 91-95.
Kondrat'ev, V.G. 1961: Materialy k xarakteristike deepričastij i formy na *-duq* v jazyke pamjatnikov tjurkskoj runičeskoj pis'mennosti. *Jazyki Narodov Vostoka* (= Učenije Zapiski Leningradskogo Universiteta, Ser. Vostokovedčeskix Nauk, vyp. 12) 126-138.
— 1970: *Očerk grammatiki drevnetjurkskogo jazyka* (Leningrad: Izdatel'stvo Leningradskogo Universiteta).
— 1973: Ob otnošenii jazyka pamjatnikov orxono-jenisejskoj pis'mennosti k jazyku drevneujgurskix pamjatnikov. *ST* 1973,3: 23-27.
— 1981: *Grammatičeskij stroj jazyka pamjatnikov drevnetjurkskoj pis'mennosti VIII-XI vv.* (Leningrad: Izdatel'stvo Leningradskogo Universiteta).
Kononov, A.N. 1980: *Grammatika jazyka tjurkskix runičeskix pamjatnikov VII-IX vv.* (Leningrad: Nauka).

Korkmaz, Z. 1962: Türkçede ok/ök kuvvetlendirme (Intensivum) edatı üzerine. *TDAYB* 1961: 13-29.
Kormušin, I.V. 1975: K osnovnym ponjatijam tjurkskoj runičeskoj paleografii. *ST* 1975,2: 25-47.
— 1976: O passivnom značenii kauzativnyx glagolov. Kljaštornyj et al., eds., 89-93.
— 1997: *Tjurkskie jenisejskie epitafii. Teksty i issledovanija* (Moskva: Nauka).
Kowalski, T. 1949: De la nature du causatif et du passif dans les languages turques. *RO* 15: 430-438.
Kuznecov, P.I. 1971: Bessojuznyje pridatočnyje predloženija s formoj na -duk v pamjatnikax orxono-jenisejskoj pis'mennosti. *ST* 1971,4: 62-67.
Kyzlasov, L.R. 1960: Novaja datirovka jenisejskoj pis'mennosti. *SA* 1960,3: 93-120.
— 1965: O datirovke pamjatnikov jenisejskoj pis'mennosti. *SA* 1965,3: 38-49.
Kyzlasov, I.L. 2002 : *Pamjatniki runičeskoj pis'mennosti Gornogo Altaja (Učebnoe posobie)*. Čast' pervaja : Pamjatniki jenisejskogo pis'ma (Gorno-Altajsk : RAN – Institut Arxeologii, et al.)
Laut, J. P. 1983: Review of Johanson 1979. *MT* 9: 166-167.
— 1985: Betrachtungen zur uigurischen „Maitrisimit". Ein präklassischer Text?. *Istanbul ... 1985: V. MATK. I. Türk Dili,* 1 (Istanbul), 171-176.
— 1986: *Der frühe türkische Buddhismus und seine literarischen Denkmäler* (Harrassowitz: Wiesbaden) VdSUA 21.
— 1987: Das „präklassische" Stratum in der alttürkischen buddhistischen Literatur. T. Tekin et al., ed., 25-34.
— 1992: Errata und Corrigenda in alttürkischen Handschriften in sogdo-uigurischer Schrift. *AoF* 19: 133-154.
— 2002: Gedanken zum alttürkischen Stabreim. Ölmez & Raschmann, 129-138.
— 2002a: Die zehn Gebote auf Alttürkisch: Betrachtungen zur *Daśakarma-pathāvadānamālā*. *SIAL* 17: 61-76.
— 2003: Methoden und Möglichkeiten der Wiedergabe von indisch-buddhistischen Termini im Alttürkischen. Bretfeld & Wilkens, 13-24.
— & Ölmez, M. eds., 1998: *Bahşı Ögdisi. Festschrift für Klaus Röhrborn anlässlich seines 60. Geburtstags. 60. Doğum Yılı Dolayısıyla Klaus Röhrborn Armağanı* (Freiburg, Istanbul: Simurg).
le Coq, A. v. 1919: Kurze Einführung in die uigurische Schriftkunde. *MSOS, WS*, 93-109 (reprint in SEddTF III, 519-537).
Li, Yong-Sŏng, 1997: Kutadgu Bilig'de gözden kaçan iki sontakı : kötü ve sayu üzerine. *TDA* 7 : 233-260.
Ligeti, L. 1971: A propos du "Rapport sur les rois demeurant dans le Nord". Études tibétaines dédiées à Marcelle Lalou (Paris), 188ff.
Mansuroğlu, M. 1957: Das geschlossene *e* im karachanidischen Türkisch. *UAJb* 29: 215-223.
— 1959: 'Das Karakhanidische'. *PhTF* I 87-112.
Matsui, D. 2000: Unification of weights and measures by the Mongol empire as seen in the Uigur and Mongol documents. Paper presented at the conference *Turfan Revisited: The First Century of Research into the Arts and Culture of the Silk Road*, Berlin.
Maue, D. 1983: Zu den Dentalen im Brāhmī-Uigurischen. Röhrborn & Veenker, eds., 54-64.
— 1984: Vorläufige Bemerkungen zu den Gutturalgraphemen in der alttürkischen Brāhmī. *UAJb N.F.* 4: 90-96.
— 1989: Sanskrit-Komposita mit präpositionalem Vorderglied in uigurischen Übersetzungstexten. Wagner, E. & Röhrborn, K., *Kaškūl. Festschrift zum 25.*

Jahrestag der Wiederbegründung des Instituts für Orientalistik am der Justus-Liebig-Universität Giessen (Wiesbaden) 52-55.
— 1996: *Alttürkische Handschriften. Teil 1. Dokumente in Brāhmī und tibetischer Schrift. Beschrieben und herausgegeben von D.M.* (Stuttgart: Steiner) Verzeichnis der Orientalischen Handschriften in Deutschland XIII 9.
— 2002: Altbekanntes und Neues: Bruchstücke des uigurischen Almanachs von 1277/78. *Papers in Honour of Professor Masahiro Shogaito on his 60th Birthday = SIAL* XVII: 77-115.
— & Röhrborn, K. 1984-85: Ein "buddhistischer Katechismus" in alttürkischer Sprache und tibetischer Schrift I-II. *ZDMG* 134/2: 286-313 and 135/1: 68-91.
Menges, K.H. 1980: Zur Phonologie, Wortbildung und Etymologie des Ujgurischen an Hand des neuen Ujgurischen Wörterbuchs von Klaus Köhrborn. *Anthropos* 75: 65-86.
Meyer, I.R. 1965: Bemerkungen über Vokal- und Schriftsystem des Runentürkischen. *AO* 29: 183-202.
Moerloose, E. 1980: Sanskrit loan words in Uighur. *JTS* 4: 61-78.
— 1986: Uighur *ulatï*. *AoF* 18: 123-133.
Moriyasu, T. 1980 : 'La nouvelle interprétation des mots Hor et Ho-yo-hor dans le manuscrit Pelliot tibétain 1283'. *AOH* 34: 171-184.
— 1990: L'origine du bouddhisme chez les Turcs et l'apparition des textes bouddhiques en Turc ancien. *Documents et archives provenant de l'Asie Centrale. Actes du Colloque franco-japonais ... 4-8 octobre 1988* (Kyoto: Association Franco-Japonaise des Études Orientales) 147-165. A Japanese version of this paper appeared in *Shigakuzasshi* 98,4 (1989) : 1-35.
— 1995: Notes on Uighur Documents. *The Memoirs of the Toyo Bunko* 53: 67-108.
Munkácsi, B. 1918/9: Review of W. Bang's 'Vom Köktürkischen zum Osmanischen'. *KSz* 18: 124-142.
Müller, F.W.K., 1891: Zur Frage über den Ursprung der uigurisch-mongolisch-mandžu'ischen Schrift. *WZKM* 5: 182-184.
Nadeljaev, V.M., 1963: Čtenie orxono-jenisejskogo znaka ñ i etimologija imeni Ton'ukuka. *Tjurkologičeskie Issledovanija* (Moskva: Izd. Akad. Nauk) 197-213.
Nadeljaev, V.M. et al. 1969: *Drevnetjurkskij Slovar'*. (Leningrad: Nauka).
Nasilov, D.M. 1960: K voprosu o perifrastičeskix sposobax glagola v drevnetjurkskix jazykax. *VJa* 3: 93-97.
— 1960a : K voprosu o modal'nyx slovax ärinč, ärki i ärkän v drevnetjurkskix jazykax. *Ališer Navoij Nomidagi Samarkand Davlat Universitetining Asarlari. Uzbek Tilšunosligi Kafedrasi.* Jangi Serija 102: 127-132.
— 1960b : O nekotoryx složnyx glagol'nyx formax v drevnetjurkskix jazykax. *Ališer Navoij Nomidagi Samarkand Davlat Universitetining Asarlari. Uzbek Tilšunosligi Kafedrasi.* Jangi Serija 102 : 133-143.
— 1961: Yenisey ve Orxun yadgerlikleridegi revišdaš kategoriyasï. *Özbek Tili ve Edebiyatï Mäsäläläri* 1: 48-53.
— 1963: *Struktura vremen indikativa v drevneujgurskom jazyke (po pamjatnikam ujgurskogo pis'ma)*. Avtoreferat dissertacii (Moskva).
— 1964: Neskol'ko zamečanij o modal'nyx časticax irgi i irgin. *Učonyje Zapiski* 11: 318-324.
— 1966: Prošedšee vremja na *-jük/-juq* v drevneujgurskom jazyke i ego refleksy v sovremmenix jazykax. *TS* (Moskva) 92-104.
— 1968: [No title]. *Voprosy Kategorii Vremeni i Naklonenija v Tjurkskix Jazykax (Materialy Soveščanija)* (Baku: Elm) 203-206.

— 1976: Konstrukcii –a turur v drevneujgurskom jazyke. *Sibirskij TS. Sbornik Naučnyx Trudov,* 42-48.
— 1976a: Pamjatniki drevnetjurkskoj pis'mennosti (orxono-jenisejskie i drevne-ujgurskie) v otečestvennyx tjurkologičeskix issledovanijax poslednix let (Obzor lingvističeskix publikacii 1969-1974 gg.. *ST* 1976/1: 82-101.
Nasilov, V.M. 1958: Imena v ujgurskom jazyke. Voprosy jazyka i literatury stran vostoka (Moskva: Institut Meždunarodnyx otnošenija) 5-30.
— 1961: *Jazyk orxono-jenisejskix pamjatnikov* (Moskva).
— 1963: *Drevne-ujgurskij jazyk (*Moskva: AN SSSR).
Nauta, A. 1969: Review of Tekin 1968. *CAJ* 13: 308-311.
Németh, J. 1939: Zur Kenntnis des geschlossenen e im Türkischen. *KCsA* I, Supplement, 515-531.
Nevskaya, I.A. 2002: The syntax of Old Turkic converbs. Unpubl. lecture held at the Frankfurt VATEC-Symposium September 2002.
Nigmatov, X.G. 1971: Otymennoe osnovoobrazovanie tjurkskogo glagola v XI veke. *ST* 1971,3: 31-42.
— 1973: Zalogi glagola v vostočno-tjurkskom jazyke XI-XII vekov. *ST* 1973,1: 46-61.
— 1975: Semantičeskaja i sintaksičeskaja funkcii padežej v jazyke vostočno tjurkskix pamjatnikov XI-XII vekov. *ST* 1975,4: 23-36.
— 1975a: Sintaksičeskaja suščnost' form prinadležnosti v jazyke vostočno tjurkskix pamjatnikov XI-XII vv. *ST* 1975,5: 21-26.
Orkun, H.N. 1936-1941: *Eski Türk Yazıtları,* vols. 1-4.
Ölmez, M. 1997/98: Review of Erdal 1991. *UAJb N.F.* 15: 282-283.
Ölmez, M. & S.-C. Raschmann ed. 2002: *Splitter aus der Gegend von Turfan. Festschrift für Peter Zieme anlässlich seines 60. Geburtstags* (Istanbul · Berlin) TDAD 35.
Pinault, G.-J. 2003: Contacts linguistiques en Asie Centrale à la lumière des textes tokhariens. Bretfeld & Wilkens, 45-83.
Poppe, N. 1966: On some Turkic nominal phrases and compound nouns'. *Reşid Rahmeti Arat için* (Ankara) Türk Kültürünü Araştırma Enstitüsü 19, seri I, sayı A 2, 372-379.
Pritsak, O. 1961: Die Herkunft der Allophone und Allomorphe im Türkischen. *UAJb* 33: 142-145.
— 1963: Das Alttürkische. *Handbuch der Orientalistik*, 1. Abt., Bd.5, Abschn. 1 (Leiden: Brill).
— 1964: Zum Parallelismus im Alttürkischen. (Helsinki) *SOF* 28/6.
— 1980: Turkology and the comparative study of the Altaic languages. The system of the Old Runic script. *JTS* 4: 83-100.
Radloff, W. 1897: *Grammatische Skizze der alttürkischen Inschriften* (St. Petersburg).
— 1909-12: Alttürkische Studien I-VI. *Izvestija Imperatorskoj Akademii Nauk* 6/3: 1213-1220, 6/4: 217-228 and 1025-1036, 6/5: 305-326 and 427-452 and 6/6: 747-778.
— 1987: *Die alttürkischen Inschriften der Mongolei.* Bd. 1: Enthält die Lieferungen 1-3 (Reprint Osnabrück: Zeller).
Räsänen, M. 1932: Beiträge zur Frage der türkischen Vokalharmonie. *JSFOu* XLV,3 : 1-10.
— 1949: *Materialien zur Lautgeschichte der türkischen Sprachen* (Helsinki). *SOF* 15.
— 1957: *Materialien zur Morphologie der türkischen Sprachen* (Helsinki). *SOF* 21.
Röhrborn, K. 1972: Kausativ und Passiv im Uigurischen. *CAJ* 16: 70-77.
— 1977-1998: *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien* (Wiesbaden: Steiner) Lfg. 1-6.

— 1981: Zum Wanderweg des altindischen Lehngutes im Alttürkischen'. H. R. Roemer & A. Noth eds., *Studien zur Geschichte und Kultur des Vorderen Orients. Festschrift für Bertold Spuler zum siebzigsten Geburtstag.* (Leiden: Brill) 337-343.
— 1983: Zu einem dialekt-differenzierenden Lautübergang im Alttürkischen. *MT* 7/8 (1981/82): 295-305.
— 1983a: Syntaktisches Verhalten der indischen Fremdwörter im Alttürkischen. Röhrborn & Veenker eds., 103-112.
— 1983b: Syntax der alttürkischen Metapher. *MT* 6 (1980): 1-11.
— 1983c: Gruppenflexion und Kompositum im Türkischen. Sagaster, K. & Weiers, M. eds., *Documenta Barbarorum. Festschrift für Walther Heissig zum 70. Geburtstag* (Wiesbaden), 317-323.
— 1987: Neue Forschungen zur Syntax des Alttürkischen. T. Tekin et al. ed., 45-50.
— 1988: Zur Darstellung der Gutturale in den indischen Fremdwörtern des Uigurischen. *CAJ* 32/3-4: 232-243.
— 1993: Zum Grenzbereich zwischen Nomen und Verb im Türkischen. *TDA* 3 (= M. Ölmez ed., *Talat Tekin Armağanı. 65. Doğum yılı dolayısıyla meslektaşları ve öğrencilerinin yazılarıyla*) 175-179.
— 1994: Die alttürkische Maitrisimit – Textbuch für theatralische Darstellungen? K. Röhrborn & W. Veenker eds., *Memoriæ Munusculum* (Wiesbaden: Harrassowitz) 99-103.
— 1995: Konversion von "Adjektiven" im Alttürkischen. Erdal & Tezcan, 135-140.
— 1996: Zur Suffixklassifikation im Alttürkischen. *UAJb N.F.* 14: 176-186.
— 1996a: Chinesische Binome und ähnliche Junkturen in der alttürkischen Xuanzang-Biographie. Emmerick et al., 255-258.
— 1998: Probleme der alttürkischen Lexikographie. B. Oguibenine, ed., *Lexicography in the Indian and Buddhist Cultural Field. Proceedings of the Conference at the University of Strasbourg 25 to 27 April 1996*, München, 105-113.
— 1998a: Zur Etymologie der uigurischen Partikel *ärki*. *MT* 19: 1-4.
— 2000: Kausative Verben des Alttürkischen in elliptischen Sätzen. L. Bazin & P. Zieme eds., *De Dunhuang à Istanbul. Hommage à James Russell Hamilton* (Belgium: Brepols) Silk Road Studies 5.
— & Veenker, W. eds. 1983: *Sprachen des Buddhismus in Zentralasien. Vorträge des Hamburger Symposions vom ... Juli 1981* (Wiesbaden: Harrassowitz) VdSUA 16.
Róna-Tas, A. 1970: Some problems of Ancient Turkic. *AO* 32: 209-229.
— 1974: Tocharische Elemente in den altaischen Sprachen?. *Sprache, Geschichte und Kultur der altaischen Völker. Protokollband der XII. Tagung der P.I.A.C 1969 in Berlin* (Berlin), Schriften zur Geschichte und Kultur des Alten Orients 5, 499-504.
— 1987: On the development and origin of the East Turkic "Runic" script. *AOH* 41: 7-14.
— 1991: *An Introduction to Turkology* (Szeged) Studia Uralo-Altaica 33.
— 1998: The reconstruction of Proto-Turkic and the genetic question. Johanson & Csató, 67-80.
Rybatzki, V. 1999: Punctuation rules in the Toñuquq inscription?. Janhunen & Rybatzki, eds. 207-225.
Salonen, A. 1937: Über den syntaktischen Gebrauch der Flexionsendungen der Nomina im Uigurischen (einschließlich des Oγuz Qaγan). *JSFOu* 49: 18-28.
Ščerbak, A.M. 1961: *Grammatičeskij očerk jazyka tjurkskix tekstov X-XIII vv. iz vostočnogo Turkestana (*Moskva-Leningrad).
— 1966: Tjurkskije glasnyje v količestvennom otnošenii. *TS* (Moskva): 144-162.

— 2001: *Tjurkskaja runika. Proisxoždenie drevnejšej pis'mennosti Tjurok, granicy jejo rasprostranenija i osobennosti ispol'zovanija* (Sankt-Peterburg: Nauka).
Schakir, S. 1933: *Denominale Verbbildungen in den Türksprachen.* Inaugural-Diss. (Roma). (= S. Çağatay)
Scharlipp, W.-E. 1994: *Introduction to the Old Turkish Runic Inscriptions* (University of Cyprus: Nicosia).
— 1999: Inverted syntax in early Turkish texts. Janhunen & Rybatzki eds. 235-243.
Schilling, U., 2001: Zur Bildung und Bedeutung von Paarformeln im Alttürkischen. *TDA* 11: 153-170.
Schinkewitsch, Jakob 1926: Rabγūzīs Syntax. *MSOS* XXIX: 130-172.
Schmitt, G. 1971: Wo siedelten nachweislich türkische Stämme im ersten Jahrhundert vor bzw. nach der Zeitwende' *AOH* 74: 337-358.
Schönig, C. 1995: **qa:ño* und Konsorten. Erdal & Tezcan 177-187.
— 1996: Komplexe Verben im *Babur-name* (Haidarabad-Kodex). *UAJb N.F.* 14: 206-217.
— 1997: A new attempt to classify the Turkic languages (1) and (2). *TL* 1,1: 117-133 and 1,2: 262-277.
Schulz, P. 1978: *Verbalnomina und Konverbien als adverbiale Ergänzungen im Alttürkischen.* Ph.D. diss. (Giessen).
Sertkaya, O.F. 1979: Uygur metinlerinde yanlış okuma, anlama ve mânâlandırmalar. *Türk Kültürü* 195: 139-145.
— 1984: Köl Tigin'in ölümünün 1250. yıl dönümü dolayısı ile Moğolistan Halk Cumhuriyeti'ndeki Köktürk harfli metinler üzerinde yapılan arkeolojik ve fililojik çalışmalara toplu bir bakış. *Belleten* 47: 67-85.
— 1985: Fragmente in alttürkischer Runenschrift. Röhrborn, K. & Veenker, W. eds., *Runen, Tamgas und Graffiti aus Asien und Osteuropa* (Wiesbaden: Harrassowitz) VdSUA 19, 133-164.
— 1990: Do the Köktürk characters have an alphabetical order?. Géza Bethlenfalvy et al., eds., *Altaic religious beliefs and practices. Proceedings of the 33rd Meeting of the PIAC* (Budapest).
— 1992: Zamirlerde katmerli çekim üzerine. *Uluslararası Türk Dili Kongresi* (Istanbul).
Šervašidze, I.N. 1978: Analitičeskie formy glagola v jazyke tjurkskix runičeskix nadpis'ej. *ST* 1978,1: 64-67.
— 1979: K voprosu o deepričastii na -ujyn, -jin; -matyn / -maty, -majyn v jazyke drevnetjurkskix runičeskix pamjatnikov. *ST* 1979,4: 90-93.
— 1986: *Formy glagola v jazyke tjurkskix runičeskix nadpisej.* Tbilisi.
Shōgaito, M. 1978: Kodai uigurugo ni okeru indo raigen shakuyō-goi no dōnyūkeiro ni tsuite (On the routes of the loan words in the Old Uigur language). *Ajia Afurika gengo bunka kenkyū* (Journal of Asian and African Studies) 15: 79-110.
— 1982: Kodai torukogo *n* hōgen ni okeru ï/i no teiboinka ni tsuite (On the reduction of ï/i in the Old Turkic *n* dialect). *Kōbe gaidai ronsō* 33: 39-57.
— 1986 (1987): Uiguru bunken ni dōnyū sareta kango ni kansuru kenkyū. *Nairiku ajia gengo no kenkyū. Studies on the Inner Asian Languages* 2. Kōbe, Shōwa 62 nen, 17-156.
— 1991: On Uighur elements in Buddhist Mongolian texts. *The Memoirs of the Toyo Bunko* 49: 27-49.
Shōgaito M., L. Tugusheva & S. Fujishiro 1998: *The Daśakarmapathāvadānamālā in Uighur, from the Collection of the St. Petersburg Branch of the Institute of Oriental Studies, Russian Academy of Sciences* (Kyoto: Shokado).

Sims-Williams, N. 1981: The Sogdian sound system and the origins of the Uyghur script. *JA* 269: 347-360.
— 2000: Avestan *suβrā*-, Turkish *süvre*. L. Bazin & P. Zieme: 329-331.
— 2000a: *Bactrian Documents from Northern Afghanistan. I: Legal and Economic Documents* (Oxford: Oxford U.P.) Studies in the Khalili Collection vol. III. Corpus Inscriptionum Iranicarum. Pt. II Inscriptions of the Seleucid and Parthian Periods and of Eastern Iran and Central Asia. Vol. VI: Bactrian.
— 2002: Ancient Afghanistan and its invaders: linguistic evidence from the Bactrian documents and inscriptions. *Proceedings of the British Academy* 116: 225-242.
Širalijev, M.Š. 1960: Ob etimologii deepričastij formy na -yban, -ibän, -uban, -übän. *VJa* 3: 98-99.
Sprachwissenschaftliche Ergebnisse der deutschen Turfan-Forschung. Bde. I-III. Leipzig, Zentralantiquariat der Deutschen Demokratischen Republik, 1972-1985.
Stachowski, M., 1995: Der Komitativ im Jakutischen und Dolganischen. *Analecta Indoeuropaea Cracoviensia* 2: 553-59. (= Smoczyński, W., ed., *Kuryłowicz Memorial Volume*, part I).
Street, J., 1984: The particle či/ču in Early Middle Mongolian. *CAJ* 28: 119-152.
Subaşı Uzun, L. 1995: *Orhon yazıtlarının dilbilimsel yapısı* (Ankara: Simurg) TDAD 7.
Šukurov, Š. 1965: -ġalır/-gälir formasi haqida. *Issledovanija po grammatike i leksike tjurkskix jazykov* (Taškent).
Tekin, Ş. 1965: Uygurcada yardımcı cümleler üzerine bir deneme. *TDAYB* 35-63.
Tekin, T. 1963: On Kök Turkic *büntägi*. *CAJ* 8/3: 196-198.
— 1964: On a misinterpreted word in the Old Turkic inscriptions. *UAJb* 25: 134-144.
— 1966: Bir "runik" harfin fonetik değeri hakkında. *Reşid Rahmeti Arat için* (Ankara) Türk Kültürünü Araştırma Enstitüsü 19, seri I, sayı A 2, 412-417.
— 1967: Determination of Middle-Turkic long vowels through ᶜarūd. *AOH* 20: 151-178.
— 1968: *A Grammar of Orkhon Turkic* (The Hague: Mouton).
— 1975: *Ana Türkçede Aslî Uzun Ünlüler* (Ankara) Hacettepe Üniv. Yayınları B 15.
— 1982: On the structure of Altaic echoic verbs in {KIrA}. *AOH* 36: 503-513.
— 1985: *Üze* zarfı hakkında. *V. MATK, İstanbul, 23-28 Eylül 1985*. I. Türk Dili, cilt 1 (Istanbul: İ. Ü. Edebiyat Fakültesi Türkiyat Araştırma Merkezi) 253-260.
— 1986: Zetacism and sigmatism: Main pillars of the Altaic theory. *CAJ* 30: 141-160.
— 1991: The comitative case in Orkhon Turkic. In Brendemoen ed., 355-359.
— 1992: Sigmatism in Chuvash reviewed. *TDA* 91: 121-130.
— 1993: Old Turkic Word Formation üzerine notlar. *Dilbilim Araştırmaları* 1993: 201-208. Refers to Erdal 1991.
— 1994: Review of Doerfer 1993. *TDA* 4: 183-190.
— 1994a: Notes on Old Turkic Word Formation. *CAJ* 38/2: 244-281. Refers to Erdal 1991.
— 1994b: *Tunyukuk yazıtı* (Ankara: Simurg). TDAD 5.
— 1995: Relics of Altaic stem-final vowels in Turkic. B. Kellner-Heinkele & M. Stachowski eds., *Laut- und Wortgeschichte der Türksprachen. Beiträge des Internationalen Symposiums Berlin, 7. bis 10. Juli 1992* (Wiesbaden: Harrassowitz) Turcologica 26, 173-187.
— 1995a: *Türk Dillerinde Birincil Uzun Ünlüler* (Ankara: Simurg) TDAD 13. Re-edition of Tekin 1975.
— 1996: On Uigur *{-gAlI} bol-, {-gAlI} boltuk-*. *TDA* 6: 63-70.
— 1996a: On the Old Turkic dative-locative suffix {+A}. In Emmerick et al., 327-333.
— 1997: On the Old Turkic verbal noun suffix *{-dOk}*. *TDA* 7: 5-12.
— 2002: On the Turkic gerundial suffix {-mAtI(n)}. Ölmez & Raschmann 375-384.

— 2003: *Orhon Türkçesi Grameri* (Istanbul) TDAD 9. 2. Baskı.
— et al. ed., 1987: *Türkoloji Çalışmaları ve F. Almanya'daki Türk Çocuklarının Eğitim-Kültür Problemleri Sempozyomu. Ankara, Hacettepe Üniversitesi (20-21 Eylül 1985)* (Ankara).
Telicin, N.N. 1987: K xarakteristike deepričastij v drevneujgurskom jazyke. *ST* 1987/6: 10-18.
— 1992: Imena deistija v drevneujgurskom jazyke (vii-xiv veka). *Vostokovedenie. Filologičeskie issledovanija* 19: 55-57.
— 2000: O proisxoždenii nekotorix narečii v drevneujgurskom jazyke. *Vestnik SPbGU Serija 2*: 137-139.
Temir, A. 1949: Uygurca *yme* sözü hakkında. *Türk Dil Belleteni* 3: 12-13, 33-43.
— 1956: Die Konjunktionen und Satzeinleitungen im Alt-Türkischen. *Oriens* 9: 41-85 (I. Deskriptiver Teil), 233-280 (II. Historischer Teil).
Tenišev, E.R. 1953: *Grammatičeskij očerk drevne-ujgurskogo jazyka po sočineniju ‚Zolotoj blesk'.* Avtoreferat (Leningrad: Leningradskij Gosudarstvennyj Universitet).
— 1963: Sistema soglasnyx v jazyke drevneujgurskix pamjatnikov ujgurskogo pis'ma Turfana i Gan'su. *Voprosy Dialektologii Tjurkskix Jazykov* 3: 124-135.
— 1971: Pereboj s/š v tjurkskix runičeskix pamjatnikax. E.V. Sevortjan et al., eds., *Struktura i Istoria Jazykov* (Moskva: Nauka) 289-295.
— 1976: Otraženije dialektov v tjurkskix runičeskix i ujgurskix pamjatnikov. *ST* 1976/1: 27-33.
— 1976a: O naddialektnom xaraktere jazyka tjurkskix runičeskix pamjatnikov. Kljaštornyj et al., eds., 164-172.
— 1979: Jazyki drevne- i srednetjurkskix pamjatnikov v funkcional'nom aspekte. — *VJa* 1979,2.
Tezcan, S. 1975 : VIII. Yüzyıldan kalma 1283 numaralı Tibetçe el yazmasında geçen Türkçe adlar üzerine. *Türk Dil Kurumu'nun 40. ve Divan-ü Lûgati't-Türk'ün 900. Yıldönümleri dolayısıyle düzenlenen I. Türk Dili Bilimsel Kurultayına Sunulan Bildiriler. (Ankara, 27-29 eylül 1972)* (Ankara : Ankara Üniversitesi Basımevi) 299-307.
— 1981: Kutadgu Bilig dizini üzerine. *Belleten* C. XLV/2: 23-78.
— 1986 : Eski Türklerde edebi dil var mıydı?. *TDAYB* 1982-83: 157-161.
— 1991: Gibt es einen Namen Kök-Türk wirklich ?. I. Baldauf et al., eds., *Türkische Sprachen und Literaturen. Materialien der 1. deutschen Turkologen-Konferenz Bamberg 3.-6. Juli 1987* (Wiesbaden : Harrassowitz) 357-375. VdSUA 29.
Thomsen, V. 1893: Déchiffrement des inscriptions de l'Orkhon et de l'Iénissei. Notice préliminaire. *Bulletin de l'Academie Royale du Danemark* 285-299.
— 1901: Sur le système des consonnes dans la langue ouigoure. *KSz* 2: 241-259 (lecture held at the 11th International Congress of Orientalists, 1897).
— 1913-1918: Une lettre méconnue des inscriptions de l'Iénissei. *JSFOu* 30.
— 1916: *Turcica, étude concernant l'interpretation des inscriptions turques de la Mongolie et de la Sibérie* (Helsingfors: Société Finno-Ougrienne) *MSFOu* 37.
— 1922: L'alphabet runiforme turc. *Samlede Afhandlinger* III (København) 27-82. (A previous, shorter version of this paper appeared in 1894-96.)
Thomsen Hansen, K. 1957: The closed e in Turkish. *AO* XXII: 150-153.
— 1963: Bemerkungen über das türkische Vokalsystem der zweiten Silbe. *AOH* 16: 313-318.
Tuguševa, L.Ju. 1974: Orxono-tjurkskij i drevneujgurskij jazyki, ix sxodstvo i različie. *ST* 114-124.

— 1986: *ol* v rannesredevekovom ujgurskom literaturnom jazyke. S.G. Kljaštornyj et al., eds., *Turkologica 1986. K vos'midesjatiletiju akademika A.H. Kononov* (Leningrad: Nauka) 277-283.

Tuna, O. N. 1957: Bazı imlâ gelenekleri. Bunların metin incelemelerindeki önemi ve Orhon yazıtlarında birkaç açıklama. *TDAYB,* 41-81.

— 1960: Köktürk yazılı belgelerinde ve Uygurcada uzun vokaller. *TDAYB*, 213-182.

Vasil'ev, D.D. 1976/1978: Pamjatniki tjurkskoj runičeskoj pis'mennosti aziatskogo areala I-II. *ST* 1976,1: 71-81 and 1978,5: 92-95.

— 1983: *Korpus tjurkskix runičeskix pamjatnikov bassejna Jeniseja* (Leningrad).

— 1983a: *Grafičeskij fond pamjatnikov tjurkskoj runičeskoj pis'mennosti aziatskogo areala* (Moskva).

Wilkens, J. 1999/2000: Ein manichäisch-türkischer Hymnus auf den Licht-Nous. *UAJb N.F.* 16: 217-231.

2000: *Alttürkische Handschriften Teil 8. Manichäisch-türkische Texte der Berliner Turfansammlung.* (Steiner : Stuttgart). *Verzeichnis der Orientalischen Handschriften in Deutschland* XIII, 16.

— 2001/2002: Der manichäische Traktat in seiner alttürkischen Fassung – neues Material, neue Perspektiven. *UAJb N.F.* 17: 78-105.

— 2002: Ein neuer alttürkischer Text zur manichäischen Beichtpraxis. Ölmez & Raschmann: 395-407.

— 2003: Studien zur alttürkischen *Daśakarmapathāvadānamālā* (1) Die Udayana-Legende. *SIAL* 18: 151-185.

Xelimskij, E.A. 1986: Proisxoždenije drevnetjurkskogo čeredovanija r ~ z i dilemma „rotacizma / zetacizma". *ST* 1986,2: 40-50.

Yakup. A. 2000: 'A new *cakrasaṃvara* text in Uighur'. *Kyoto University Linguistic Research* 19: 43-58.

Yamada, N. 1971: Four notes on several names for weights and measures in Uighur documents. L. Ligeti, ed., *Studia Turcica* (Budapest: Akadémiai Kiadó) 491-498.

Yoshida, Y. & Moriyasu. T. 1999: Bugut inscription. T. Moriyasu & A. Ochir, eds., *Provisional Report of Researches on Historical Sites and Inscriptions in Mongolia from 1996 to 1998* (Osaka: The Society of Central Eurasian Studies) 122-124.

Zieme, P. 1969: *Untersuchungen zur Schrift und Sprache der manichäisch-türkischen Turfantexte*. Unpubl. Ph.D. dissertation (Berlin).

— 1981: Bemerkungen zur Datierung uigurischer Blockdrucke. *JA* 269: 19-20.

— 1984: Zur Verwendung der Brāhmī-Schrift bei den Uiguren. *AoF* 11: 311-346.

— 1991: *Die Stabreimtexte der Uiguren von Turfan und Dunhuang. Studien zur alttürkischen Dichtung* (Budapest: Akad. Kiadó) Bibliotheca Orientalis Hungarica 33.

— 1992: TWYNY = *töni*, eine bisher verkannte Postposition des Alttürkischen. *AoF* 19: 160-165.

— 1992a: Alternative Übersetzungen in alttürkischen buddhistischen Werken. C. Fragner & K. Schwarz eds., *Festgabe an Josef Matuz. Osmanistik – Turkologie – Diplomatik*. Berlin, 343-353.

— 1992b: Some remarks on Old Turkish words for "wife". *TDAYB* 1987:305-309.

— 1994: Review of Doerfer 1993. *OLZ* 89: 570-574.

— 1998: Turkic fragments in 'Phags-pa script. *SIAL* 13: 63-69.

— 2000: Verse des Candrasūtra nach chinesisch-uigurischen Bilinguen. *TDA* 10:65-80.

— 2000a: Araṇemi-Jātaka und ein Sündenbekenntnistext in einer alttürkischen Sammelhandschrift. Bazin & Zieme: 401-433, planches XXXVI-LIII.

— 2001: A Manichæan-Turkic dispute in runic script. P. Mirecki & J. BeDuhn eds., *The Light and the Darkness. Studies in Manichaeism and its World* (Leiden: Brill) Nag Hammadi and Manichaean Studies L, 209-219.
— 2002: Gab es Entnasalisierung im Altuigurischen?. Unpublished lecture held at the Frankfurt VATEC-Symposium September 2002.
— 2002a: Ein weiteres alttürkisches Fragment des „Sūtras von der vollkommenen Erleuchtung“. *AOH* 55: 281-295.
— 2002b: Alttürkische Fragmente aus dem Devatāsūtra. W. Gantke et al. eds., *Religionsbegegnung und Kulturaustausch in Asien. Studien zum Gedenken an Hans-Joachim Klimkeit.* (Wiesbaden: Harrassowitz), 226-244.
— 2003: Indische Wörter in nichtbuddhistischen alttürkischen Texten. Bretfeld & Wilkens, 153-163.
— 2003a: A new fragment of the Old Uighur Vimalakīrtinirdeśasūtra. *SIAL* 18: 143-150.

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